1948 Archbold Cape York Expedition

Monday December 8 (1947):

Left New York to make advance arrangements for the expedition in Australia and carry out a reconnaissance of the Cape York Peninsula. George Tate, chief mammalogist of our party left for Australia a week ago to carry out a separate, preliminary project financed by the American Museum. George will examine mammal collections in the Australian Museum, Sydney, and in the Queensland Museum, Brisbane. He will also travel and do a little mammal collecting in New South Wales and in parts of Queensland south of the Cape York Peninsula.

Our cargo left New York on the "Vardulia" December 6, consigned to Burns, Philp & Co., Ltd., Cairns. The Vardulia will take it as far as Brisbane; from there it will be shipped to Cairns by coastal boat. Our party of four men from the Museum is to meet at Cairns about the last week in February.

Geoffrey Tate, who will look after supplies and transport, and collect insects, reptiles and amphibians, and Hobart M. Van Deusen, 2nd mammalogist, are due to sail from San Francisco on January 30th.

Maria, Geoff and Van saw me off at Grand Central Station. My train, the Water Level Route, left for Chicago at 5 pm.

Tuesday Dec. 9:

Owing to a train wreck ahead of us last night, we were diverted from the regular route followed by my train, and arrived at Chicago about 10:45 am - nearly 2 hours late. Another hour had passed before I got through transferring from the Central Station, where my train from New York pulled in, to the North Western terminal, from which my train for San Francisco leaves tonight. Passengers get free transportation across town by arrangement of the Parmelee transport System. The job is done with limousines, but there are not nearly enough of them to do it efficiently.

My baggage taken care of, I took a taxi to the Chicago Museum of Natural History (formerly the Field Museum) to call on Austin Rand. Rand was ornithologist on the three Archbold expeditions to New Guinea. For several years he has been at the National Museum, Ottawa. Recently he has been appointed Curator of Birds at Chicago.

Spent most of the afternoon with Dr. Just, recently appointed head of the Botany Department. Most of the botanical staff were out of their offices. Dalgren, head curator emeritus, was away. So was Hugh ~~Xxxxx~~ Cutler, economic botanist and specialist in the history of maize, whom I met at Shiprock, New Mexico, in 1945. Cutler was then a freelance plant collector, making his way down the San Juan River in a leaky old row boat to join a party which proposed, and did, a boat journey down the Grand Canyon. This journey was done in staunch "Green River boats.". Met Williams, who is specially interested in woods, and has made a fine collection on field trips in northern South America and Mexico.

Just showed me through the library, herbarium, rooms where technicians make reproductions of plants for exhibition purposes, and the botany exhibition halls. Was much impressed with the size of the botanical lay out and the apparent efficiency with which it has been organized. The herbarium collections are in steel cabinets in which there is lots of room. In phanerogams the arrangement is alphabetical through families and genera and, I believe, species. Folders of

eight different colors, used for species, indicate at a glance the world geographical region in which the species was collected. The cryptogams are split up into fern, moss, hepatic, etc. collections housed in separate rooms. Just says the collections are especially strong in cryptogams. The best geographical representation is in North American and South American plants. There is a special palm herbarium in which bulky specimens are stored in cardboard boxes, with photos, drawings, descriptions, etc. The palms are the chief present interest of Dalgren, who is now making studies in germination of palm seeds, involving field trips in Cuba.

A collection of about 40,000 photographs of types, made in European and other herbaria, is a notable feature.

There are several botany exhibition halls. Like the others I saw in the museum, these are very large, of modern design, and by no means full to capacity. The pride of the botany halls is the famous reproduction of a forest of the Carboniferous age. A magnificent piece of work. Another is the Welswitschia group, finished quite recently. One hall holds reproductions, models and actual specimens of the major families of plants, and some families of special morphological interest. Another holds palms and economic plants and plant products. There is one hall of North American woods, another of woods of the rest of the world. It will take years of work, and much money, to fully develop these botany halls. The same applies to the bird and mammal halls, which I saw only briefly, with Rand.

Splendid work is being done in making reproductions of fossil plants and plant accessories for exhibition groups. In this Chicago seems far ahead of the American Museum. I have never seen such painstaking, accurate detail. Much of this work is done in plastics, a medium in use here many years. The painted backgrounds of the groups do not approach the high standards of the American Museum.

In Rand's office I met Dr. Francis Harper, who arrived in Chicago today on his way home to Philadelphia after a six months collecting trip in Keewatin. Harper works independently and peddles his collections for funds to carry on his researches. He is well known for a book on extinct mammals. Said to be a hard man to get along with. I should not be surprised. Very scholarly, overly intense, and perhaps too critical of others, in a puritanical way which to me seems pretty much warped. Coming from the far north, and taking of it to men he had never seen before, he soon got on to tales of the shocking record of Stefanson and Camsel in ~~xxxing~~ sireing halfbreed children. Futher on it developed that he, Harper, had gone into the north on this trip with only three months' supply of food. For the other 3 months he lived on trappers and traders. This in the beginning of winter. I wondered what Stefanson and Camsdel would have thought of that, and whether in their opinion what they got was more expendable.

Rand got a very poor salary in Ottawa. Since he has come to Chicago the Canadian Government (Defence Dept.) has offered him $7,000 to do a volume on Canadian mammals. The Army wants it for a basic information series for use in "survival" training. Rand will do the job in his spare time. He is thoroughly familiar with the literature and most of the mammals. It is possible that next year he will make an expedition to Upper Burma - the Stillwell Road country. The museum has been offered the funds by some wealthy person - have forgotten his name- who has not done anything like this before. This person wants to go on the trip himself.

Had dinner with the Ranos in town and left Chicago on the "San Francisco Overland" train at 8 pm.

Wednesday Dec. 10:

Travelled all day over the plains of Nebraska and Wyoming. At dusk there are high mountains ahead. We are nearing the Rockies. Quite a lot of snow on the ground on most of the country we have passed over today. Nebraska looks like rich country; the kind that makes a nation strong. Full of corn and meat. They grow corn to fatten cattle. The cattle, all Herefords and Black Angus, stand around in groups in the snow. They are fed hay and grain. Every farm and ranch has its hay stacks; some of the hay is still in stooks in the fields, where it will be covered with snow if not brought in soon. The corn is stored in silos, and on the ear in cribs in the open. Whatever is done about feeding Europe this winter, American should not starve.

I have talked to several people on the train, including soldiers and the Pullman conductor, and it seems that to these ordinary Americans it does not matter much whether Europe starves or not. All, however, are interested in the opinion of others on the possibility of war with Russia. They themselves don't know what to think. Their thinking is confused and detached. They are fatalistic about it all. It is someone else's business.

There are a number of European refugees, or immigrants, on this train. The little, be-shawled women look very much like strangers. Some of the migrants are undoubtedly Jews. One brach lad of about 12 years, who sat talking broken English in the club car last night, seemed to be a French Jew. The conductor is critical. He says many migrants are crossing the country. Also, he is sure that if this goes on there will soon be no place for blue-bellied Americans, unless some are saved for museums.

This morning at breakfast I got well and truly robbed by the Southern Pacific Railroad. A damned lot of thieves. I ordered half grapefruit, plain omelette, toast and coffee, priced table d'hote at $1.30. That is about what other railroads are charging in these days of boom to bust. Put on top of that I was charged 30 cents for a dab of marmalade to eat with the last of my toast. The steward was polite but firm about it. He pointed out the price, listed in a corner of the menu. He was not responsible for the hold-up, of course. I have written the company, protesting the gouge. It will be interesting to see what sort of reply I get, if any.

Thursday Dec. 11.

Woke at grey dawn, and sliding up my window blind, found we we snaking through a pass in the Rockies, west of the border of Utah and Nevada. Nothing but bare black rocks and soft white snow. By breakfast time we were down in intermontane valley between the Rockies and the Sierras. This is high country, and not much better than desert. No trees in the valley, and very few small scattered ones on the mountains which rise from its surface. No grass. Only a low bushy vegetation (perhaps low sagebrush) browned by cold. Hereford cattle are bred here, and the steers no doubt sent to the corn belt for fattening. Small mines here and there; some of them abandoned. Little, drab, unpainted villages with trees growing in them. The trees bare and not a tinge of green anywhere. Poor, cold country, it looks to me.

We stopped at Reno. I did not see it. Must have been reading. We lost there a dazzling, mink-coated female who had attracted much attention on the train.

After Reno came the Sierras. Magnificent scenery of snowy high peaks, tall coniferous forests, and not much else. Man have not spoiled this country. I tried hard to get photographs, but where the views were best the train ran under wooden shelters which protected the tracks from falling snow and rocks, and through short tunnels. Still, I think I got pictures to remember it by.

The snow petered out when we were still high in the Sierras. Interesting coniferous forests below this altitude: a dense closed forest in the hollows between ridges, containing a number of species of trees. In the foothills, large grey-leaved shrubs, which perhaps belong to the chapparal formation, grew densely among the pines. Small apple orchards, mostly neglected or abandoned, began here.

The great, heavily peopled Sacramento Valley was disappointing where we crossed it. Rich land, all of which seems to have been cultivated down to salt water. But few acres were actually under crop at this time of year. In fact, most of it looks as if it had been fallow for more than one season. Saw only a few patches of truck crops, and some big pear orchards. Palms are planted as ornamentals, but not in great numbers. Probably the climate is too cold for most species. Tall eucalypts were common toward the coast.

Sacramento, capital of California, is a poor advertisement for the state as seen from the train. The slummiest town I have ever seen. Big sections of little wooden shacks. These slum areas are a disgrace, even if they are only occupied by migrant farm workers, which I doubt.

My train journey ended at Oakland, where we transferred to a ferry for the half-hour run across to San Francisco. Landed at Market Street at 6:50, on time, but well after dark. San Francisco's high skyline of brightly-lit buildings looked almost as impressive as Manhattan's, as seen from the ferry boat.

I wired from the train for a reservation at the Whitcomb Hotel, on Market & 8th Streets. Upon arrival there by taxi I found the public rooms crowded and not a little noisy with San Francisco's Irish, who are holding their annual shivoo in the hotel. It is a moderate price hotel, but I was put into a room which looks rather expensive. Was unable to raise the Matson Line by phone to check on the sailing time of the "Marine Phoenix." According to the phone book the passenger office is on the phone all night. Perhaps the employees are all Irish.

Took a stroll about town looking for a place to get a quick meal, and ended up at Original Joe's, where you sit at a counter and see your food cooked. Good food, attractively served, ample, and reasonably priced. Good-looking, charcoal-broiled steaks were $1.75. Joe's is an Italian place. Eating places of that type seem common downtown. Saw several in a few blocks. Some plush-looking eating places close to my hotel.

Quite a lot of Japanese in the streets, and negroes whose blood has been well diluted with white. North of New York the absence of a color bar is noticeable. Whites and negroes mixed freely in Chicago. Was told by Rhena Band that negroes shop in the best stores and no one thinks anything of it. On my train to the west coast white and negro soldiers travelled together in the Pullmans, ate together in the dining car, and some of the negroes frequented the club car.

In San Francisco I am again in a city that looks out on the world and takes keen interest in what goes on overseas. Since leaving New York the San Francisco "Chronicle" is the only paper I have seen that gives a good coverage of world news and the broader aspects of national news. A very good paper. On short acquaintance it looks better by far than the New York Times. More liberal in view, and it is the only paper I have seen that does not hide in its columns news that is unpalatable to conservative Americans who like to think that their leaders in the State Dept. and in the European dog-fight can do no wrong. It prints, where everyone can see them, very frank reports on international affairs. Most of the mid-western and western papers I read on the train give no international news at all on their front page, and not much anywhere else. It is

unsafe of course to judge a country and its people by what one sees and hears on a train journey. But that trip across the ~~country~~ continent has given me a better understanding of the hard core of isolationism that is so influential in American thinking. I also think I can see some of the reasons for it. What could one expect of inland tribes, living in a vast monotony of flat lands, with not a hill or a tree to which to lift their eyes from the soil? Surroundings like that, and a life devoted to cattle and corn, must surely have a deep effect on the development of the individual and tribal mind. The very safety in which those people have lived for generations has been bad for them. It would be better for them if enemies sometimes came raiding out of the vague distance which is their horizon. The only other tribes they know and come in contact with are friendly people, whose land will not produce all the food they must have to eat, and who, instead of taking these things by force, are willing to trade cloth and trinkets and strong liquor for them. They have lived and prospered without having to bother much about what went on in the outside world, so why be concerned about it now? Is it surprising that their big chiefs, their Tafts and Vandenburgs, carry such thoughts to pow-wows in the place called Washington?

Dec. 1[illegible] - Friday

Our ship, Matson Line, "Marine Phoenix"; Captain Johansson; left Pier 32 San Francisco at 5 P.M. A full passenger list of 500 adults and children. Conditions crowded. Very poor organization for getting passenger's baggage from pier to cabins. Have lost my flight bag and typewriter in the confusion. Most of my clothing is in the flight bag.

The Marine Phoenix is a partly converted U.S. troopship on charter to the Matson Line, 12,400 tons, diesel-steam. Ship said to be much better now than formerly. She used to be known as the "Hell Ship". All gacilities apparently inadequate. The food, however, is good - very good, so far. Ten men in my cabin, "Room 108"; most of them going to New Zealand. Most of them seem to have wives aboard. One or two of the younger men are ex GI's going out as immigrants.

Room 108 is about 20 x 20 feet with 5 sets of 2-tier bunks, 3 chairs, a small table and 3 sinks and mirrors. No closets or lockers, but plenty of hanging space for clothing, and ample room under bunks for bags. No mats or rugs on the painted steel floor. No floor covering of any kind in the public shower room and toilets which we use. Each steward looks after 40 people. There is no room service. A laundry does the ship's small linen and accepts one lot of passenger's laundry on the voyage. Passengers for Australia, like myself, have their laudry done day after the ship leaves Auckland.

H.E. Patterson, who wrote the first New Guinea Shangri-la article in the press was on the pier to see me. He corresponded during the war but had not met before. Was also interviewed by a couple of San Francisco newsmen and a Reuters correspondent.

Have place #3 at the captain's table. There are 12 places at our table, 20 at other tables of the same length.

In San Francisco this morning I went early to the Matson line office to che my reservation and pick up my mail. After that took a taxi to Golden Gate Park to see Bill Richardson at the Steinhart Aquarium. Golden Gate Park is likened to Central Park in New York. To me it is much more attractive. It is not so overrun with people. The buildings in it are finer. Owing to the equable mild climate the plantings are much more luxuriant. The land was waste sand hills originally. It has been well landscaped, planted with trees and shrubs suited to the climate, and developed with roads. The original director did a good job in screening service buildings with trees, and in refusing to have statuary in his park. The plantings generally are informal and unlabelled, but there are good lawns and flower beds to give color. There is an arboretum, in which the plantings are by families and properly labelled. I did not have time to visit this. The museums and study collections of the California Academy of Sciences are in the park. A rather ornate building houses the bird collections and aviaries. The modern Steinhart Aquarium is in another building, one of a group comprising African Museum, Herbarium and other institutions.

Had time to see only the aquarium and the herbarium. Richardson is in charge of the aquarium, or at least he has the actual care of the fishes. A very fine show of over 500 species of salt and freshwater fishes, local and exotic, well displayed and well kept. Saw the whole set-up, from laboratories to boiler room and display halls. Richardson says the collection of tropical

fishes is below normal owing to the difficulty in replenishing stocks. Many of their tropical fishes come from Samoa. The Matson boats brought in fresh stocks regularly before the war. The company got considerable publicity from it, and it was good for the aquarium. The persent Matson boats are not fitted with the equipment necessary for transporting fishes.

At lunch, in a restaurant a few blocks from the park, I sat at table with some of the scientific staff. Miss Alice Eastwood and her sister, Mrs. Phelps. Another botanist whose name I have forgotten. Dr. Orr, in charge of mammals and birds; and Miss Sextant, librarian of the Academy of Sciences. Was much impressed with Miss Eastwood. A fine old lady now well over 80, but still active in a limited way, and still in charge of the herbarium. Apparently she is a woman of some private means. At present she is doing a revision of the California lilies.

After lunch Miss Eastwood took me through the herbarium, where I met Dr. Howard, who is now sorking on the California carices, and Mr. Kearney, who is revising his recently published Flora of Arizona.

The herbarium is sadly overcrowded, and for want of space is not very well organized. The arrangement is according to the natural system of Engler(?). Steel cases, in smallish rooms and in hallways, hold all the collections that can be got into them without undue overcrowding. The rest of the collections are in cartons and cardboard boxes stacked high on top of the steel cases, where they must be reached by ladder. The botanical library, too, is scattered for want of space, and doubtless also according to the whims of Miss Eastwood. She set out to explain to me the system of arrangement for herbarium and library, but soon admitted that it was largely an arrangement of convenience by which collections and books were placed where she could have those she used most handy to her place of work. This is Miss Eastman's show. She runs it to suit herself, but everyone loves her just the same.

Richardson seems to have changed little since he was with us in New Guinea in 1938-39 and in Arizona in 1940. Boyish, enthusiastic, and driven by half-contained nervous energy. He may be even a little more excitable than before. And now he is partially crippled. I did not question him on it, but probably his disability is the result of a brain tumor which laid him low during the war. It affects his gait. His feet are somewhat turned out and partly out of control.

Sat. Dec. 13:

Am gradually getting to know my room fellows: Woodhall, a returned New Zealand importer; Happy, who was an AAF lieutenant and is traveling to Melbourne with his wife; Pitcher, an English business man traveling with hit wife to visit a son in Australia, etc.

Chief topic of conversation on the ship is the ship itself. People are glad to travel on it but complain of the unnecessary crudeness of appointments and especially the fares charged. Passengers who traveled on the ship before say fares have gone up about 10% since May of this year. Afternoon tea used to be served in the lounges, now there is none, etc. The best crack so far has come from the skipper. Asked why the ship does not stop at Honolulu, he said, "If we stopped there all passengers would go ashore and most of them would not come on board again".

Sunday, Dec. 14:

Weather continues cool and cloudy. Not warm enough to sit on deck in comfort without a blanket. At noon we had traveled 410 miles and were 29 degrees north of the equator. The ship does between 16 and 17 knots. Is capable of greater speed, but is running slow on Gov't orders. A number of blades have been stripped from one of the turbines.

Last night there were two 25-cent bingo games. Tonight there is a movie show. Not enough space at either for all the people who want to take part.

Monday, Dec. 15:

Cloudy cool weather continues and to noon we had made only 391 miles. Something went wrong with the works when we were at lunch. Severe vibration then a slowing of speed. Today a half hearted attempt is being made to organize deck sports. There was a Methody sort of sing-song in the smoking room this morning. After lunch a heavy-handed woman operated on the piano and a tyro horn player about finished the process of clearing the room. Examined the reading room. Found three battered clothbound novels and 12 paper covered pulp stories on shelves which had not been cleaned since last voyage.

The many children on board (over 70) seem generally in better humor today. Also there is not so much evidence of sea sickness on decks and floors of corridors. One young fellow in my cabin, an ex GI now 23 years old, has his wife and 3 small kids on board. Two of his children were born in New Zealand before he was 21.

Some of the ex GI's and their wives seem unfit for parenthood. Their children get little care. Today two small boys have been found wandering unattended and taken to the purser's office. At 4 A.M. a crew man found another child lost on an upper deck and took it to the bridge for safety. This child was not claimed by its mother until seven o'clock in the evening.

Wednesday Dec. 17:

After a day or two of restlessness, I, like the other men in my room, have settled down to eating, sleeping, reading, and not very much exercise. The ship is too crowded for easy walking on the upper decks. The weather has been showery and, until today, too cool for comfortable lounging in the open. The public rooms are overcrowded and noisy. The only quiet place is in our cabin, where fortunately there is room to sit around, and a constant breeze through the open portholes keeps the place clear of tobacco smoke.

The voyage is proving rich in human contacts. I have some interesting roommates. We sit around and talk a good part of the day. _____ Bishop is an Australian agricultural scientist who served with the Australian Army in Palestine, was in the retreat from Singapore, in the land fighting on Java. He was captured with his unit on the south coast of Java made prisoner of war by the Japs and put to work on railroads in Burma with British and Dutch captives. After hostilities he joined UNRA, served with that organization in nationalist and communist China, and recently took 300 refugee Jews from Shanghai to Berlin. He is now considering a post that has been offered him as an agricultural officer

Sunday, Jan. 14:

Weather continues cool and cloudy. Not very crowded on deck in comfort although a blanket. At noon we had traveled 411 miles and were 25 degrees north of the equator. The ship does between 15 and 17 knots. We usually [illegible] better speed. But is running slow on Joy's orders. A number of planes have been sighted from one of our turbines.

Last night there were two 24-cent bingo games. Tomorrow there is a movie show. Not enough space or seating for all the people who want to attend.

Monday, Jan. 15:

Slept well. Weather continues cool to noon, and maybe only 24 miles. Something wrong with the work when everywhere at lunch. Every visitation then a shortage of meat. Today a gulf learned attempt is being made to transmit a dark cloudy. There was a birthday ball at ship-score in the smoking room this morning. After lunch a heavy-handed woman operated on the piano and a tyro-hoor player hoard finished the process of clearing the room. Reading the reading room. Found three battered children novels and 12 paper covered pulp stories on shelves which had not been cleaned since last voyage.

The many children on board (over 70) seem generally in better health. Also [illegible] is not so much evidence of sea sickness on deck and floors of corridors. The young Italian [illegible] cable, an [illegible] 27 years old, [illegible] and 3 small kids on board. Two of his children were born in New Zealand before [illegible].

Some of the ex GI's and their wives seem until for [illegible]. Their children get little care. Today two small boys have been found [illegible] and taken to the [illegible] office. It [illegible] a [illegible] child lost on a [illegible] and [illegible] it to the bridge for safety. The child was not claimed by the mother until [illegible] in the evening.

Tuesday, Jan. 16:

After a day or two of restlessness, I [illegible] in my room. Have [illegible] to reading, sleeping, [illegible] not very much exercise. The deck is too crowded for [illegible] walking on the upper decks. The weather has been [illegible], with [illegible], too cool for comfortable lounging in the [illegible]. The public rooms are overcrowded and noisy. The only quiet place is in our cabin. [illegible] fortunately there is room to sit around, and a [illegible] through the [illegible] keeps the place clear of tourists [illegible].

The voyage is proving rich in human contrasts. I have some interesting roommates. We all [illegible] and take a good part of the day. [illegible] in an [illegible] agricultural [illegible] with the Australian [illegible] in Africa. Was in the retreat from Singapore. In the [illegible] fighting on Java. He was captured with his unit on the south coast of Java. [illegible] by the Japs and put to work on railroads in Burma with British and Dutch prisoners. After [illegible] in Japan [illegible] survey all that organization in Manchuria and [illegible] China. [illegible] from Shanghai to Canada. He is now contemplating a post that has been offered him as an agricultural officer

officer in New Guinea.

Bishop gives a very interesting and illuminating account of the situation in China. The Chiang Kai Check - T.V. Soong regime, according to him, is rotter to the core and fighting a losing fight against the communists. The nationalist regime seeks to preserve the old feudal order, and is doing it by the harshest methods. The communist movement is a movement of the people. It is not the communism of Moscow, but a peculiarly Chinese version of communism. The communist armies do not ransack the country as the nationalists do. Instead, they do all they can to rehabilatate the country and bring the land under production. When territory is captured the communist soldiers are put to work to repair war damage and plant crops. As the farmers return, farmer's committees are formed to take over the land from the army and distribute it to farmers, growing crops and all, free of cost. Where original landlords remain, they are allowed to retain ownership of a part (I think 40%) of their former lands, and rentals to tenants are fixed to reasonable rates. The communist army pays cash for all its food and supplies. The farmers - about 80% of the population lives on the land - soon learn to trust the well disciplined communist soldiery, inform them of nationalist movements, and take care of their wounded. Captured nationalist soldiers are well treated, kept a couple of months, then given the choice of staying with the communistd or returning to their army. Some stay, some don't. Those who return to the nationalist side remember their lot as captives, and when again fighting the communists they do so without fear of being butchered if they give themselves up. Thus the morale and fighting of Chiang's armies is being undermined.

During the truce which General George Marshall arranged between nationalists and communists, U.S1 surplus military stores were being handed over to Chiang in great quantity, and a constant stream of other supplies for war was arriving from the United States. Chiang's armies were being trained by Americans. The truce was only a delaying move to give Chiang a chance to get his forces in shape to clean up the communists. This treachery has earned Americans the hatred of all Chinese who are not on Chiang's side. North China is not safe for any white man now. On one occasion Bishop entered communist territory in an American army truck, and was fired on and captured by communist soldiers. When captured he was robbed of everything, but on establishing his identity everything was returned to him. everything but his watch, which was sent to him two months later.

Bishop says that in Germany the people are actually starving in the western zone. Fascist, anti-semitic demonstrations are common. Jews are being brought back to Germany and reestablished, as victims of fascism. This is being done by a U.S. committee which took over from UNRRA. The personnel of this committee apparently is entirely Jewish. With few exceptions Bishop's 300 refugees from Shanghai were a despicable lot and gave a lot of trouble. They were brought to Germany free of charge. There were six physicians in the group, and all of them refused to give medical attention to their fellows without payment. When payment for medical services was arranged, at a flat sum for the ship's voyage, the six so arranged it that only one a day was on duty. When transferring to a train in Italy, some of the Jews acted up and were clubbed by Italian police. (The Italian police are as fascist now as in Mussolini's time). On the train a refugee woman had a miscarriage and was refused attention by the six doctors - the arrangement for payment did not apply to the train journey.

These are only a few of the things told by Bishop of the mess in post-war China and Germany.

Another of our discussion group, _____ Armstrong, is a retired New Zealand farmer, on his way home from a visit to England to see his old mother. Wilkinson is interested in early voyages and is getting together materials on Drake's third voyage. A full account of this voyage has never been published. Wilkinson plans to work on it in his retirement. Tried to get access to the records in the British Museum and those of the Hakluyt Society, but owing to war damage and disturbance these records are not yet available. Suggested that he get in touch with Robert Cushman Murphy, who is now in New Zealand, and through him get information on the records available in U.S.A. Murphy is a student of early voyages.

Of the ten men in my room only one is a little objectionable in personal habits. This is a Canadian named Woods. A very widely travelled man, too. Seems to have spent much of his life dodging Canadian winters, though apparently not a man of at all substantial means. Rather, a beachcomber of sorts. Elderly, so narrow in build as to be almost shoulderless, but pot-bellied, and with an untidy thatch of greasy, yellowed gray hair. His one article of underwear - one in kind and number - is a pair of jocky shorts which will not need description after a week of wear. His one visible shirt used to be white. It has a collar, a detachable one, which he wore for a few days. Now he dresses sans collar, and with the lower buttons of the shirt open to show a wrinkled old belly. He travels without a toothbrush. At night his unwashed dentures go into one of the three tumblers with which we are provided for drinking. Apart from all this he seems a nice enough fellow.

Thursday Dec. 19:

The weather gets clearer, and steadily hotter, as we glide along toward the equator. The overcast condition for several days was from a big disturbance farther north. This morning there was a report of a severe storm 1500 miles to the north of our position, and a Liberty ship breaking up in it. We left San Francisco in nice time to miss this bad weather. Our ship is Kaiser-built.

Yesterday we came across a derelict U.S. landing craft. It was about one-third under water, and evidently had been adrift a long time. Our ship radioed a report on it to Pearl Harbor.

The ship's crew has changed to summer khaki, the younger passengers, and the Jewish refugees especially, are discarding more and more clothing, and getting well burned by the sun. U.S. military insignia are worn by the officers of the ship. The captain sports the much tarnished eagles of a full colonel; the first mate is a lieutenant-colonel, the chief steward a captain, and so on. Have seen no one wearing corporal's or sergeant's stripes.

There is nothing fancy about Captain Johansson. He invited me up to his quarters after dinner this evening. Stripped to the waist - "This bloddy ship is hot as hell" - he told me about his war experneices on U.S. troop transports. He took troops to Milne Bay, Hollandia, Leyte, Japan, also the North African invasion. A Boston Swede, and a real old sea dog. He gave me a good photograph of the balsa raft "Ron-tiki" on which six young Norwegians recently drifted from the coast of Peru to the Tuamotus.

Friday Dec. 19:

We have plugged along at about 390 to 400 miles a day and at noon were about 4 degrees north of the equator. Our course should take us through the Line Islands before dark. Quite a number of sea birds around this morning - gannets, a brown petrel, an albatross, several frigate birds, and a tropic bird. I spent some time

watching them through glasses with a couple of bird enthusiasts who sit at my table.

The bird watchers are Miss Mary C. Wheelwright and Miss Augostina Stoll, neighbors from near Santa-Fe in New Mexico and traveling together to New Zealand, and later Australia. Both are elderly. Miss Stoll is a school teacher, recently retired. Miss Wheelwright is widely traveled and perhaps quite well off. She is a student of religion in Indian culture, with particular reference to the Navajo. Has a private museum in New Mexico with a collection of over 400 Navajo sand paintings. Is interested in studying said-paintings in other parts of the world. One of her trips, some years ago, was into western China.

Others at my table are Mr. and Mrs. Cedric Rouse, from near Sydney. Rouse is one of the owners of a plant that manufactures portland cement. Does not look like a business man and acts more like a playboy. Mr. and Mrs. Clothier are from Wellington. Clothier is a General Motors distributer in charge of the GM assembly plant at Wellington. Mr. and Mrs. Dunphy are Americans, past middle age, traveling to New Zealand. Dunphy is a retired shipping man, trying to decide whether to settle down in California or New Zealand. Finally there is _____ Arnold, a youngish chap in the U.S. diplomatic service, traveling to Sydney.

Monday Dec. 22:

Getting lazy. Thought I would skip notes for a day, and find it has run to three. Saturday we crossed the line about 9:30 in the morning. The usual crew jokes about feeling the bump, and downhill travel for the rest of the way.

Yesterday saw the beginning of Christmas decorations in lounges and dining room. The ship well provided with the traditional fixings and the stewards doing a good job with them. Christmas trees, wreaths, garlands, red bells, etc. They have a good dodge in producing snow for the trees - fluffy white asbestos powder from the engine room. Santa Claus, according to secret information at the captain's table, comes on board tomorrow with gifts for all the kids. There will be no Christmas Day on board. There will be no 25th of December. We drop that day in crossing the international date line.

An event which was kept rather quiet yesterday was a burial at sea. A 78-year old man from the cabin next to ours died of pneumonia and his body was disposed of at sundown. There was no notice of the ceremony; I was reading in my bunk and therefore missed it. Other passengers are sick with something that might be 'flu. Woodhall, in my cabin, is down to it with a temperature of 103, and is being attended by the ship's doctor - Dr. Slaughter! The ship carries two or more nurses and of course has a hospital, down on B Deck, which has no porthole ventilation.

We are due to arrive at Pago Pago tomorrow morning, where air mail can be posted for the U.S. at mainland rates of 5 cents per ounce.

Sunburn and the increased heat are slowing the tempo of shipboard life; appetites are fading as the dining room temperature climbs toward 100. Fortunately, the northeast tradewind has held right across the equator. We are well south of the line now and still have this cooling wind. The ship would be hell without it.

Tuesday Dec. 23

A day ashore at Pago Pago. The island, with its rugged peaks forested to their tips, looked remarkably green and enticing as we neared it in the early morning. The naval station and town are in a landlocked harbor and hidden from the sea. Tied up at the wharf at 7:30. Landed one passenger, a Mrs. Luce, missionary. The native police band played on the wharf, and a choir sang songs in Samoan. Native women, in long lavalavas and white bloudes, ringed the mission lady's neck with so many laes that only the top of her hat stuck out above them. Laes of fresh flowers were on sale at the wharf. Fragrant frangipanni and many sorts of colorful flowers worked into chains, and soon wilting in the heat. A pretty custom, even though commercialized.

Pago has altered a lot since I was here in September 1939. There was no wharf then. A wharf was built during the war and about two-thirds paved with concrete. Perhaps the war ended before they could finish the concrete job. At any rate, the exposed timbers of the unf nished part - some soft coniferous wood, apparently - are now fast rotting away. Many barracks buildings and stores were built during the war, all painted navy grey. A military airfield was established on the seaward side of the island, south of the harbor entrance. Part of the waterfront, in the town, now holds a row of officer's houses, in a setting of trees and lawns that is forbidden ground to the lowly. A good many navy men still stationed here on base jobs. But the station seems to be fast slipping back to its pre-war sloppiness, if one may judge from the appearance of the one navy vessel in harbor. This grubby patrol boat, it looks like the one that was here in 1939, is almost as shabby, and its crew as unmilitary, as the auxiliary ketch "Samoa" which runs a service between Pago and Apia.

Some of the passengers clubbed together to hire cars and buses for drives along the roads which follow the shores of the island. They paid from a quarter to a dollar for the ride. Before we landed word had spread through the ship to beware of owners of vehicles for hire. Unwary passengers have been known to get stuck with charges of $10. Ship's rumors always gain in the telling. For example, talk at table this evening had it that the missionary Luce was actually no disciple of the Lord, but no less than Clare Booth Luce traveling incognito. She did not look like a fashion plate to me, and it seems unlikely that the excongresswoman could have passed unrecognized by the American women on board. A few days ago we heard whispered stories children breaking arms and legs on the steel ladders and stairs and lying in maimed piles down in the hospital. This morning the "Have you heard" is that Auckland is ravaged with polio, that no passengers will be allowed ashore there, and for some unexplained reason we will stay a week instead of three hours in Suva. It used to be thus in the army. Rumors, rumors, starting no one knew where, passed on by all, but not believed by the old hands until they were confirmed in daily orders.

Much of my own time ashore was spent in trying to get pictures of the town and the open market place where natives sell articles of handicraft, and tropical fruits to visitors. I want to expose some color film for a test of Eastman Kodak processing as done in their Melbourne laboratories. Found plenty of interesting subjects, but almost constant cloud made color photography difficult. Chief articles on sale, spread on mats beside the street, under the porch of the movie theater, and displayed in a thatched market shelter, were shell and coral necklaces, grass skirts done in garish un-native colors, palm leaf baskets and table mats, tapa cloth (coarse stuff in small pieces), and carved wooden bowls and model canoes. Prices very reasonable except for the wood carvings. The bowls were priced out of all reason. Popular with our passengers were the fruits - mostly ripe bananas, pineapples, drinking

coconuts, and a few avocados. Some of the pineapples were exceptionally big. Saw some very fine taro too.

It is said by Captain Johansson (a sternly anti-administration Republican) that the natives are being ruined fast by an over-generous Uncle Sam back in Washington. They can live without work and therefore will not work. From my own limited observation I should say that at least the natives have not become insolent and disrespectful of the white man. Took particular notice of the attitude of the native men and women (mostly women) of the market place and their attitude to their customers. Saw only one example of freshness, and that on the part of a young man who had the damned hide to address me as "Mack". It was very plain, instead, that these Polynesians retained much of the gracious charm and softness of character which always distinguished them as a people and made them easy marks for exploitation by the White man. It was disgusting to see them being beaten down on their moderate prices by brutish dregs of the ghettos of Europe roaming from our ship.

I noticed too the food eaten by the natives of the market place, taking a bite while waiting to make a sale. They ate bananas and baked taro. Who grew these foods if the natives lived on Uncle Sam's bounty? The only white man's food I saw was cake being eaten by young girls who were lounging with some colored men of the ship's crew. The cake no doubt had been brought from the ship. The women show the usual Polynesian kindness to strangers. Saw U.S. navy men fraternizing without reserve with native men, and one sailor walking with his native wife and their child. Yet despite the war's influx of Americans there is little evidence of recent mixing of blood. White men have left their mark there nevertheless.

The natives seen in Pango seemed to be a mixture of village people, in for the day, and hangers on of the naval base. The hangers on were in the minority. Saw some of them, men and women, in a hot spot where a native orchestra played to white and native beer drinkers. Not a pleasant sight. There were a number of tables in the room, occupied mainly by our passengers, waited on by native girls. Natives stood around, or danced in an open space between tables. A mild and tawdry sort of Trader Horn orgy.

Wandering along the one short business street past the saloon I came to a few trade stores selling canned goods, clothing and cloth. The usual trade lines, marked at prices that seemed high in comparison with the prices charged by the natives for their handicrafts. Farther on was a small, museum-like building, run by government, in which handicrafts were offered at prices higher than those ruling in the street market. A library with a beautifully thatched roof was closed for lunch. This was in the native quarter. The houses were of European style, with breadfruit and mango trees for shade, and little patches of purplish-leaved taro beside them. Girls, fully clad, bathed in little streams running down from the steep mountain sides. My walk ended at a church, a big building of soft concrete blackened by age and damp. The high windows were without glass. All but one door was locked. The wooden forms inside were shiny from use, and beer bottles were strewn through the weeds of the churchyard. It was a Protestant church.

Amazingly steep land is cultivated by the natives on the mountainsides rising from the harbor. The mountains are scarped toward the top and may be the sides of an old volcano. Cultivation is carried as high as the base of the scarps. Above that is primary forest, scored by landslip gullies in which a fine treefern forms fairy forests. A pale green vine hangs in curtains from forest trees edging the garden clearings. Most of the garden lands are fallow, overgrown with bright green grass (Imperata arundinacea ?), or a mixture of grass and regrowth trees. The crops are taro, breadfruit and bananas. Coconuts grow in abundance along the foreshores. Did not see signs of much activity in fishing.

December 25

In cross ng the International date line we missed Christmas Eve. We also ran into real hot weather. Today the ship has been like a furnace. It has not cooled since it gathered heat at the Pango wharf. In the dinind room last night temperature was 93½ degrees. Today it has been around 95. In changing course westerly for Fiji, such wind as there is strikes the opposite side of the ship and our cabin is hardly habitable. Poor Woodhall, our sick man, is still sweating it out in bed, getting about half a dozen shots of penicillin in the 24hours and showing no definite improvement. He has been told he has pleurisy, but maybe it is pneumonia.

Santa Claus came aboard just before we left Pango yesterday, bringing presents for the children. This evening at dinner the ladies all received a gift from the ship - a package of California dried fruits. There was not even a greeting for the men. Turkey dinner, or for those that preferred it, filet mignon. Quite a feed. Failure of the captain to appear at Christmas Dinner drew caustic comment from several ladies at our table. Most likely he is taking every chance to avoid the silly questions they always ply him with when he is at table. Islands and reefs in these seas kept him on the bridge this evening, according to report.

Parties all over the ship last night. Sun deck littered with broken beer bottles. Trash all over the ship in public places. No hose or broom has been put to decks today. This ship is a disgrace.

Passed fairly close to "Tin-can Island" (Nieufua) in the morning. Following a very severe volcanic eruption about a year ago, the population was evacuated by the New Zealand controlling authorities. Am told that a ship called there quite recently and found some natives who had stayed behind.

Friday Dec. 26

Tied up to Suva Wharf at about 8 AM and left at eleven. Before me second sitting breakfast gong sounded, my name was called over the ship's barker system and I found that Dr. A. C. Smith of the Arnold Arboretum had come on board to meet me. He had with him Marshall, Conservator of Forests. Marshall had his Chev station wagon at the wharf and they had planned a morning's outing for me. Went first to the Grand Pacific Hotel to call on Mrs. Smith, then drove out some miles along Prince's Road to a forest reserve where Marshall has a small establishment of thatched houses and is making small scale experimental plantings of exotic (mainly exotic) timber trees. Development of a larger program is about to begin. Marshall is primarily a forest engineer, with experience in Malaya. Has been here only 4½ months. Prior to his appointment, no real interest in forestry matters was taken by the Fijian government. Now they are faced with an immediate demand for box timber for packing bananas for export to New Zealand. There is an urgent demand for this. Fijian exporters of bananas must have case wood or lose their export quota for New Zealand. I gather from Marshall that no adequate supply of native box or case woods is in sight. He will plant quick-growing Albizzia falcata. A small experimental plot of this has grown to 60 feet high and about 7 to 9 inches in diameter in 4½ years. Marshall plans to plant this tree on a 10-year rotation. Experimental plantings of mahogany (Swietenia) have done very well. All plantings are being made on forest regrowth land.

The forest regrowths, on rather shallow reddish clayey soil derived from soapstone, are very luxuriant. Rainfall is high on this side of the island of Viti Levu. A giant Alpinia, fully 40 feet tall and looking like a tall, slender banana, is conspicuous. Treeferns (Cyathea) are common, and so is Commersonia bartrania, now covered with white flowers. Kauri pines prominent in relics of the former forest. Marshall is starting to label conspicuous trees on the roadside for the benefit of tourists.

Smith, Mrs. Smith and their two children arrived in Suva a few days ago from Vanua Levu. Smith has done most of his collecting there. He has been in Fiji since April. Will return to the States on the returning Marine Phoenix. Is planning to spend his remaining two weeks in collecting near Suva. Many of Gillespie's types were collected in this locality, within about 10 miles of the town. Smith has collected about 3000 numbers and 25,000 specimens. Is taking 10 sets of each number when possible. Has about 200 numbers of bryophytes. Says a great deal of exploration remains to be done before the flora will be at all well known. Smith made another trip to Fiji in 1934. He plans to publish a flora of the islands.

The only road of much importance in the Fijis is the one which encircles the island of Viti Levu - a distance of about 300 miles. Smith's travel has been mainly by small boats and native carriers. Mrs. Smith and the children have accompanied him, at least as far as his base camps. He was based at one place for 4½ months. Carriers have been hard to get in some localities. Has been paying them 5/- a day as against 2/- in 1934.

Smith is very much interested to know if Dick is contemplating further expeditions to New Guinea.

On our return to the hotel I was introduced to _____ Popham of the Dept. of Agriculture. Smith says he is the only person in Fiji with any knowledge of taxonomic botany, but his work and interest is in economic plants and weeds. Marshall seems weak in botany.

A sizeable consignment of Ford cars lying in crates on the wharf. A big British navy tanker filling the fuel storage tanks and unloading a vast quantity of fuel in 50 gallon drums.

Sat. Dec. 27:

Heading south for Auckland over a smooth sea. The decks were cleared of Christmas rubbish today. Was interviewed by a Mr. Robert Feldman, an American journalist going to Sydney to take up a job with the "Telegram." Most of the day spent in finishing Lambert's "Yankee Doctor in Paradise". Story of a pioneer doctor of the Rockefeller Foundation who spent over 20 years in the western Pacific, with headquarters at Suva. Worked in North Queensland, New Guinea, Solomons (including Rennel and Bolona), New Hebrides, Fiji, Tonga, Samoa and Cook Islands. Highly colored and in parts grossly exaggerated, but a good book by a man with a fine record of service and a profound and humane interest in the native.

I should not like to be on this ship in an emergency. Was having a beer after bingo this evening when someone smelled smoke, someone said "Fire," about half the passengers jumped to their feet in the lounge, and started to bolt, God knows where. The smell of smoke came through the air blower system for a motor which had burned out. Going on deck after the fuss had subsided, I found the captain, minus his teeth. He had scrambled into a shirt, but forgot his dentures, when the alarm sounded in his cabin. "Damned ship wouldn't burn anyhow," he said. "All steel. She's only a barge. Reminds me of one of those revolving peanut cookers you see in the streets." In conversation it developed that part of the trouble and unexpected expense in reconditioning the Matson lines passenger liners is that the company spent hundreds of thousands of dollars on wall linings of impregnated wood which was supposed to be fireproof, but which the authorities condemned as unsafe. Labor unions have gotten all the blame in the press. It is owing to unreasonable wages costs, says the press, that these ships are not back on their run.

Monday, December 29:

Was amongst the outer islands at dawn and by 8 o'clock had tied up at Prince's Wharf in Auckland. Put off 160 passengers here and were supposed to take on 122, but some of the passengers failed to turn up. No one seems to know why. After seeing a little of the place it seems likely as not the reason might be the Christmas holidays, ot the big race meeting being held today.

Auckland is set in beautiful surroundings. A landscape of low hills, mostly treeless now and lushly green with grass. The long arms of the two sheltered harbors, one on the east coast and one on the west coast of the island (North Id.), occupy valleys between the hills. The isthmus between the harbors is only 4½ miles across. It looks like a simple proposition for a ship canal. No high land, and apparently all soft volcanic rock that would be easy to cut through. The rock is resistant enough to form steep low cliffs edging the harbors. It is pale grey in color, finely stratified, and looks like consolidated ash of recent origin. A recent volcano (Rangitoto), no longer active and covered with scrubby forest, forms an island several hundred feet high at the entrance to Auckland harbor. (Auckland is on the east coast of the North Island). Big guns were mounted on Rangitoto during the war. The harbor was otherwise strongly ~~fortifiexx~~ defended. Probably all the hills about Auckland are volcanic cones. Australians call New Zealand the "Shaky Isles."

After breakfast I joined the Bishops and other passengers on a 2½ hour sightseeing tour by bus. This took us through the suburbs and to the top of Mt. Eden. Mt. Eden is about 800 ft. high and has a perfect crater about 150 ft. deep on its summit. From it one looks down on both harbors, and it is surrounded by suburbs of the town. Took colored photos and had morning tea at a kiosk on its slopes. The tea was good; the sandwich bread yellow and doughy! New Zealand still eats austerity bread. Much of its flour is imported from Australia.

Green hills, pale blue water, the red roofs of the town, and the dark forest of distant mountains made a colorful scene. Scraps of forest near the town were reddened by the massed flowers of the pohutakawa tree, a species of Metrosideros. This beautiful tree is much planted in the town. It is the tree of Auckland. Nicely shaped, and with dense dark foliage and rough grey bark, it is a very attractive park and street tree which should do well in the southeastern States and California. The suburban gardens gay with planted annuals and with hydrangas. Gladioli do wonderfully well, as do roses, dahlias, carnations, geraniums, stocks, gazanias, and almost any flower that can be found in a seedsman's catalog. Magnolia grandiflora a popular tree - now in flower.

Looking down from Mt. Eaton, I was struck with the virtual absence of traffic on the streets outside of the business part of the town. Gas is not rationed, but placards are displayed asking that petrol be saved to avoid rationing. Not many new cars in the streets of the city proper. Was disappointed in the city. For a population of about 300,000 it is unimposing. Apart from Queen Street, the streets are rather too narrow. The town is clean outwardly, but shabby, and the shops are unattractive. A small restaurant on the main street, where I had a light lunch, was plainly dirty. I went into three barber's shops before I found one that looked clean enough for a haircut. The doors of some butcher's shops were not screened and the meats on display not otherwise protected from flies. I saw no flies, but they must be around at times.

My haircut cost 1/9, my lunch of pressed tongue and salad, the same. The very good beef and mutton in the shops seemed exceedingly cheap after the inflation prices now being charged in the U.S. Meat prices are displayed in the butcher shops. The highest price I saw was 1/9 a pound for boned porterhouse steak. Filet cost 1/5. Mutton cost more than lamb. Mutton prices were up to a top of 1/3 per pound. This for really choice meats.

Prices for fresh vegetables were relatively high: Tomatoes 2/6 to 3/- a pound, beans 6d a pound, cucumbers 1/- or more each, etc. Manufactured goods were very expensive indeed, and for the most part very shoddy looking. Prices for clothing, footwear, electrical appliances and hardware were far aboce those prevailing in the States and most of the goods looked like five and dime stuff or old stock that had been bought at clearance sales in bigger, more up-to-date cities. The almost 100% Anglo-Saxon town folk dress soberly. I found myself looking for eyes other than grey, and atypical noses. The typical New Zealand nose is slightly tilted and thickened at the tip, and not a little aggressive. Saw few people of either pure or mixed Maori b blood. The only other non-whites were Chinese green grocers.

The harbor has much wharf space but was crowded with shipping. Many big ships from Britain and some from the U.S. Congestion due in part to the holidays. Work on the wharves stopped at noon on the 24th; resumed today, will go on tomorrow, then stop until January 5th. This is all general holiday time. The stock exchange and the legal offices stay closed from Christmas Eve to January 13th. Part of the harbor congestion is due to a rush of overseas ships with goods which must be within the 3-mile limit by January 31. All imports are on government permit. The 1947 permits expire the day after tomorrow. New Zealand economy is rigidly controlled by the socialist government. Apparently controls are being overdone. There is a feeling that the government may be defeated at next elections, stay out for one term, then return with modified ideas. Have heard considerable talk on politics by New Zealanders. The consensus seems to be that if the Conservatives are returned to power, after being out for many years, they will go too far in trying to undo the work of the Labor Party and be promptly thrown out again. Measures like socialized medicine, fiercely opposed by the conservatives, have the approval of the people. It is said too, that the doctors are doing more business than ever before. Government pays all the fees 7/6 for an ordinary call at a doctor's office and the women expecially flock in for advice.

I thought in my innocence that I would pick up a bottle of whiskey to take back to the ship - the Marine Phoenix is dry except for "Lucky Lager" which one carries from the novelty shop. Nothing doing. Went into the bottle department of several hotels. They were selling bottled beer, wines, and mixed cocktails. No liquor of any kind, at least on the shelves or for sale to strangers. Was told in one place that they had not sold "spirits" for eight years. Elsewhere I heard that liquor can be had black market for very high prices.

Tuesday Dec. 30:

Heading west over the Tasman Sea for Sydney on the last leg of the voyage. Weather cool. Slept under two blankets last night. Long ocean swell is upsetting to some of our new passengers. We have carried a small group of acrobats and other professional show people from San Francisco. At Auckland we picked up a Russian ballet company numbering 75 all told. There is not a Russian name in the ballet company - all British-Australian.

Thursday, Jan. 1:

A quiet New Year. Some passengers feeling the motion as we enter rougher seas on approach to Australia. Cedric Rouse and I invited to the bridge to see the set-up there. The bridge is the one part of the ship of which the skipper is proud. Says it is as well equipped as any great liner. I would not doubt it. The latest in navigational aids. Radar, depth sounding machine, and the new "Loren" to supplement the old Mackay radio directional equipment. Smoke and fire detecting apparatus, bridge-controlled CO2 fire extinguishers, etc., etc.

Friaday Jan. 2:

Entered Sydney Heads before daylight in thick weather, and anchored at Watson's Bay for quarantine and immigration inspection. Docked at Circular Quay, right in the city, about 9:30.

A most awful mess in handling passenger's baggage. It was after 2 P.M. when I got through Customs, and it would have been hours later had I not bribed a wharf laborer to root out my things and assemble them for Customs examination. The hand baggage of over 500 passengers was stacked on a narrow, covered deck, about 20 feet above wharf level. From there it was moved, one piece at a time, by sliding it down a steeply inclined, low-sided chute. Great amusement on the part of the wharfies when a suit case jumped the side of the chute and landed on the wharf. A loose piece on the side of the chute pierced more than one suitcase as I watched. I rescued my typewriter and lighter baggage before passengers were forbidden to re-board the ship, then got a chiselling wharfie to handle the heavier pieces. All operations stopped an hour for lunch. It was plain to me from the beginning that the wharfies were resolved to make at least an eight-hour day of handling the baggage - perhaps a bit of overtime.

Customs officers very decent and not too fussy. I declared some cigarettes and a few curios picked up at Pango. Was charged 15/6 per carton duty on the cigarettes. No opening of bags or inspection except in regard to declared articles. Letters from George Tate saying he was in Brisbane. No business I knew of to keep me in Sydney, and no business possible until after week-end. Decided to ~~transfer passenger's baggage~~ go to Brisbane by night train, and bought my ticket at the dock. The railway transfers passenger's baggage to the station and puts it on the train. Seemed a nice arrangement to me. Took only my brief case and hurried into town to call at the Australian Museum and present a letter of introduction to R. W. Robson, editor of P.I.M. Robson away and his office closed tight.

At the Museum had a talk and afternoon tea with Dr. A. B. Walcomb, the Director. A geologist formerly on the faculty of Queensland University. Friendly enough, bot not a man I would expect much of. Roamed the streets, looking in shop windows, and made visits to the bars of the leading hotels in the hope of finding someone I knew from the North or New Guinea. Found only a ship's passenger. Sydney is a real city, with a character of its own, but reminding one of both New York and San Francisco. Shops seem smallish after those of big American cities, but window display good. Prices apparently much lower than those in New Zealand - about present U. S. level. Clothing of most kinds is sold under a ration coupon system. Nice things in the windows. Women well turned out in summery cottons. Did not see a single example of the "new look". The slim, agile build of both men and women noticeable to a newcomer from the States. Brunettes are common enough here, but facial features are not cast in one mold, as in Auckland. For all their athletic appearance, the Sydneyites move with much less bustle in the streets than the pudgy New Yorkers. Practically every man wears a service man's badge on his coat lapel. Burma campaign moustaches are popular. The stylish hat has a wide brim, the crown is pinched down low all round like a Harlem pork-pie, the rim raked down in front and up behind. Peculiar style.

My train left Central Station at 7:40 PM. I started without a sleeper berth, but managed to get one from the conductor.

Saturday Jan. 3:

Arrived South Brisbane Station at 4PM, about 1½ hours behind schedule. My father there to meet me. Newspaper and radio reporters too. Forgot to mention that when our ship anchored yesterday I was similarly interviewed and the Sydney evening papers carried items on the expedition. So did the country papers I bought on the train.journey. Brisbane radio had carried reports the last two evenings. One paper published the photo of a lady who has made known her intention of offering her services as a guide for us on the Peninsula.

When I went to my bags for cigarettes I found I had none. Some skunk must have watched me go through Customs in Sydney, then got away with the lot - 600 of them. For convenience in getting through Customs, I had unwisely put them in the unlocked and unlockable side pockets of my flight bag. Natives have filched my cigarettes, but never a white man. I did not think the breed had sunk so low. Probably a dock porter was the culprit. Most of them are low types, looking more like bar flies than real men.

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A note on George Tate's experiences since his arrival in Australia by air about the end of the first week of December. The ship that brought his field equipment arrived in Sydney on the 11th, anchored in the harbor, and did not discharfe any cargo until just before Christmas. George therefore abandoned plans he had for a trip into western New South Wales. Put in the time going through the mammal collections in Australian Museum, with Troughton, and photographing skulls. Had no trouble in getting N.S.W. collecting permit through Troughton and Walcomb. S ent his gear on to Brisbane Dec. 30. Very pleased with the reception he has had in Brisbane. Mack is tops according to George. On an introduction to a Customs man, from Mack, his gear cleared in a jiffy. George now preparing to leave for SW Queensland by rail on Tuesday.

Monday Jan. 5:

A long, busy day. Called first at Queensland Herbarium, for mail,. Letters from Geoff, and galley proof of Nyasaland article from NYBG. White has lost weight and does not look very well. A heart condition prevents an operation for gall stones. Working mainly on his Solomons plants, as routine allows. Bill Francis away on annual leave. Saw Stanley Blake and Lindsay Smith. Blake has made good recovery from attack of infantile paralysis several years ago. Several young men and women in herbarium - some probably students from University? Herbarium in bad shape. Piles of specimens in newspaper folders piled high everywhere. Much deterioration through insect attack. Specimens not poisoned, through shortage of help. Much material coming into the herbarium. Great shame that better care can not begiven such valuable specimens.

Met Mary Strong Clemens at the Herbarium. She was sorting and arranging a collection of plants brought back recently from a trip to Eungella Range, in the north. Working in a back shed. A strange little woman, with a far-away, religious gleam in her eye. Now 75 years of age. Decidedly eccentric if not a bit queer. Has been here since she was evacuated from New Guinea ahead of Japanese invasion in the war. Her plants now go to University of Michigan and other U.S. institutions.

Went out to the Queensland Museum after lunch. George Tate there, busy packing for a trip west. He starts by train tomorrow morning. Plans to stay about five days with N. Geary, of Offham, between Charleville and Cunnamulla. Geary a keen amateur naturalist, and a station owner. George looks better than I have seen him for years. Very pleased with reception he has had in Brisbane. Everyone very helpful; no red tape, but he is still waiting for his collecting permit from the Dept. of Agriculture. Has bought a railway ticket which allows unlimited travel on all lines, with 300 lbs. baggage for 2 months., for thirty odd pounds.

Very favorable impression of George Mack, new director of the Museum. A Glasgow Scot, a graduate of Melbourne University, and formerly on the staff of Melbourne Museum. Has

been in Brisbane 2 years - since Heber A. Longman's retirement. An ornithologist. Evidently a frank, forthright man. Keen to send one of his staff with us to collect while we are in the country between Portland Roads and Coen. Wants mainly animals for exhibition skins and casts (is setting out to re-do his exhibition halls). Have agreed to Mack's request. He wants to send a man for a month or two. Had no time to through the Museum.

George and I to dinner with the C. T. Whites.

Tuesday Jan. 6:

A.M. worked on draft for a radio address, and organization of preliminary work to be done in Brisbane. Lunch with B. M. Johnstone and her daughter Betty at their house on Kangaroo Point. Jock Williamson there too; down from the North on a holiday and returning next Saturday to Cairns en route Georgetown.

PM first to the Herbarium. Letter there from the Secretary, Royal Geographical Soc. of Australasia (Queensland), suggesting that the Museum investigate certain stone arches in the Carolines. The sec. is Dan A. O'Brien - completely mad according to White.

Phone calls at White's office from Mr. Hurst, of Brisbane Telegraph, who is doing a write-up on our expedition. Have misgivings about this article. Hurst does not know the first thing about expeditions, and of course will exploit the human interest angle. Have promised a short item to Hyde of A.B.C. for transmission at 5:15 tomorrow afternoon.

Appointment with W. L. Scott at 4:30 at Lennon's Hotel. Scott an ex-Captain of artillery (Australian) who was stationed at Portland Roads for 12 months in 1943/44. Now has a civilian job in dispersal sales of surplus military stores. Took Dr. Flecker out for a week's collecting in Portland Rds.-Iron Range area during the war. A sober, schoolmasterly sort of fellow who likes to roam in the bush and observe things but is no naturalist and perhaps a ppor bushman. Very helpful with information on country and vegetation, and gave me 10 photos of the area. In 12 months he saw no malaria, dysentery or scrub typhus in this part of the Peninsula. Healthy country he says, but sandflys bad at times on the coast. Coast country now over-run by pigs which were let loose by government some 15 years ago to provide increased food supply for the blacks. Blacks a poor lot, living on Mission food whenever they can.

Hot, muggy; temperature up to 86.5 degrees. Radio news of a small cyclone, the first of the season, centered at Thursday Island, moving southeast and bringing rain.

Men of Brisbane have a clothing style new to me. Civilian version of the army battle tunic, worn as a shirt, without a coat, but with tie. Nice neat ide for summer wear in town.

Anything written or said about tobacco shortage in Australia is an understatement. Am without smokes half the time. Cigarettes are kept under the counter for old customers. So far I have only got blank states when I have asked for tobacco. Capstan cigarettes cost 10d. for 10. Smoked my last American cigarette today. Looks as though I am going to get rid of my smoker's cough in quick time.

George Tate left for the west today. Mack called up to say that he got his collecting permit.

Wednesday Jan. 7:

On the thrid try in town this morning, founr a place with tobacco for sale. Plenty of it, apparently, at 1/2½ per ounce. This is Australian cigarette tobacco. One can

get English pipe tobacco anywhere, at very fancy prices. It seems that the small shops - stationers, barbers, etc.- that used to sell cigarettes and tobacco, now make a living by selling tickets in the Golden Casket (state lottery, for support of public hospitals, ambulances, etc.). Cigarettes when available are a penny each. Was offered English cigarettes at 7/6 per 50 tin.

Called on the American Consul (W. L. Peck). Tried without success to buy a rewind spool for my old Leica. Am having the camera tested - there is something wrong with the shutter, perhaps - and hope to take it to Cape York so that I will have one 35 mm camera for color and one for b and w pictures. Revised radio script with Hyde of ABC, recorded it in afternoon and it went on the air 7:45. Called on Mr. Brooks, Senior Inspector of Customs. He will give clearance for our cargo when it lands in Brisbane, but advises that I first get advice from Burns Philp on the question whether, after customs clearance here, we will have any claim on the coastal shipping company for damage or loss between Brisbane and Cairns. Nice old boy who looks like a well fed German professor; looks at you over half-moon glasses and talks about insects and native medicinal plants. A keen amateur naturalist. Good contact.

A good part of the afternoon spent in getting ration cards for meat, tea and butter. When finally I got the cards, I found they had given me clothing coupons to boot. Before ration cards were issued me I had to register as an alien - a new regulation, in operation since the first of the year. That took the time. No red tape. But the registering officer wanted to talk about conditions and trends in America. Australians are greatly interested in American affairs, and many of them are surprisingly well informed.

Rations are 6 oz. butter and 2 oz. tea a week. Meat rationing is complicated. It applies only to beef and mutton. There is no fresh pork on the market. All other meats, including cooked beef and mutton, are not rationed. Townspeople seem to get plenty of meat under the system. Am told that in country districts rationed meats are sold freely without coupons.

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Thursday Jan. 8.

Writing letters to Geoff, etc. in morning. P. M. visited offices of John Burke & Co. in South Brisbane. Talked with John Burke Jr. (Manager), and Mr. Hann, who handles passengers. Very affable and willing to help. Have been holding two four-berth cabins for us on both the February and March boats to Thursday Id. Their boats have only just been released from Government control. They hope to resume regular 28-day service between Brisbane aba T. I., beginning this week. The 900 ton Wandana will be on this run. She has to go into drydock in March or April (most probably April, says Burke, as March likely to be too rainy) and will then be replaced by a much smaller vessel, the "Alagna". Alagna has accommodations for only 4 passengers, but will fit us in somehow. The March boat will probably leave Brisbane on the 6th, Cairns on the 11th, and Arrive T. I. about the 16th. This schedule will suit us well, as it will get us to the Tip at a time when the rains should soon be over. The April boat will leave T. I. on the southward voyage about April 22. This will give us about 5 weeks to work the Tip. The boat does not normally stop at Portland Roads on the southward run, but will make a special call to drop us there. This boat schedule will suit us very well, if it works out that way. There is labor trouble in coastal shipping or a prospect of it, according to Burke.

John Burke also has a small vessel, the "Leisha", which this year will maintain a monthly service between Cairns and the Annie River Landing (the new port for Coen), during the dry season. We can therefore land at Portland Roads from the Wandana or Alagna, move overland to Coen, then south to Annie River to meet the Leisha which will carry us to Cooktown. Prospects look good for boat transport along the coast.

Letter from Geoff, giving financial statement of expedition expenses to date. A lso letter from the Ipswich Workshops Education Association, inviting me to give a lunch hour talk.

White tells me that we will need permits from the Forestry Dept. to collect certain orchids.

Friday Jan. 9.

C Called at the Museum to get a copy of our permit to collect zoological mater ial. The Minister of Agriculture and Stock has given us an unlimited permit "to collect fauna ~~xxx~~ or their eggs in the State of Queensland." No restriction on numbers or on the collection of protected mammals and birds. Mack, however, warns me of a hidden joker in the Fauna Protection Act. There is a clause under which royalty can be collected on skins. Mack says that several years ago, when he was at the Melbourne Museum, he was charged royalty on skins collected in Queensland. The royalty clause was no doubt written in to collect revenue from ~~xxxx~~ commercial collectors and from kangaroo shooters a nd possum trappers. Have not yet been able to read the Act, but apparently there is no plain escape for purely scientific collectors, and certain high officials have seen to it that scientific collectors paid up. Mack mentions the possibility of our having to pay up to 5/ - royalty on skins. The Dept. has been reorganized recently, with new men in the top places. Mack will make unofficial inquiries on our behalf. Talked the matter over with white and he is of the opinion that Mack is inclined to magnify difficulties and it is most unlikely that we will be stuck with royalty payments. Will go into this when I return from Crows Nest next week.

Also have to find out if there are going to be any restrictions on the number of zoological specimens we can export. Permits to collegt, and permits to export, are two different things. It is necessary to get export permits from both Queensland and Commonwealth authorities. Discussed this with the Collector of Customs (Commonwealth) this afternoon, and was assured by him that his department will OK anything that is approved by the State authorities. My personal feeling is that we can expect a liberal interpretation of the Fauna Protection Act by Queensland officials. They have certainly been generous in granting permission to collect.

Called on D. V. Mitchell, Brisbane manager of Burns Philp & Co. The usual friendly reception and offer of all assistance. Mr. Bell, who attends to Customs business, was called in for conference. The "Vardilia" bringing our 16 crates (5373 pounds) of cargo from New York is due in Brisbane January 25th. Shipping is scarce on the coast, but our cargo will be sent on to Cairns by first boat, probably John Burke's Wandana about February 8th. Priorities on coastal shipping have been removed. In the event of delays in shipping on the coast through labor or other troubles, we can have the cargo railed to Cairns. This would be very costly, however - over L.50 per ton against less than L.4 by boat.

Decided to clear cargo at Bisbane, and took Bell along to discuss details with my friend Brooks. Some new law or regulation is pending re possession of firearms. Brooks called up the C.I.B. on this. We might have to register our guns and rifles later, but C.I.B. is not interested in them now. The customs people ask us to keep account of the use of our preserving alcohol, and give particulars when we finish field work. We will be expected to pay duty on anything we sell. This the only proviso in our clearance through Customs.

John Williamson took me along to meet , president of the United Graziers Assoc. of Queensland and chariman of the Meat Export Board. An experienced grazier, breeder of Aberdeen Angus cattle, who made an official visit to the U.S. last year. Says the Zebu cross in North Queensland is turning out very well as far as beef product is concerned, but under open range conditions prevailing there the cattle get very wild. The original zebu bulls came from the King Ranch in Texas.

Visited Dr. F W. (Freddie) Whitehouse, Geology Department, University. The intensely alive writer of a reconnaissance report on the Cape York Peninsula, made while he was an Engineer Intelligence Officer during the war , and still on the secret list. I have a copy of his report for study. Showed me a fine set of mounted aerial photos of parts of the peninsula. Offers to sort out for me a set of duplicate photos, and get me a copy of a special map he made, showing the different types of country on the Peninsula. Whitehouse was about to leave town for a few days. Will see him again. Very useful contact, greatly interested in the Peninsula.

Jan. 11 to 15:

On a visit to Crows Nest to see folks of my family. Travel by rail to Toowoomba, rail motor to Crows Nest. Country wonderfully lush and green after one of the best seasons in years. Grass thick and soft. Young corn flourishing; alfalfa being cut for hay; farmers troubled by weeds in their fields. This country was drought stricken ~~for hay; farmers troubled by weeds in their fields~~ a year ago. The cattle (mostly dairy cattle in these parts) ate up all the old grass, hence the soft new grass, now shin to knee high. Many cattle died in the drought. The present summer season is extraordinarily good all over Queensland, with the exception of a patch of grazing country in the north west.

The Crows Nest district has changed greatly since my boyhood years. Farming has ruined the country except for farmers, who are prosperous enough and modernizing their equipment as fast as the things they want come on the market. Every farmer now seems to use milking machinery. Electric light plants are being installed. Kerosene-burning refrigerators now common. Great demand for trucks and cars. English car makers making a bid for the market; saw only American trucks. Farmers getting 2/- per pound for butter fat - highest price ever. Fat pigs bring up to ten and eleven pounds. Grain prices high, but in this district most grain is used for fattening pigs on the farms.

The fine tall Eucalyptus forests have disappeared but for a patch here and there on poor stony land. Some land still in the grey ghost stage of dead trees standing in the paddocks; other land pretty well cleared of dead timber but for the great stumps of the trees, which will outlast another generation of farmers. Only small patches of "scrub bushes", and an occasional hoop vine or bunya pine, show where the fine tall rain-forests once stood. Most of the rich wild life has gone with the timber. Wallabies and bandicoots, and possums, are still here, but the common mammals are English hares and foxes. The surviving possums live in the hollows of dead trees and raid the farmer's corn and the orange trees in his garden. Most of the forest birds have gone. White cockatoos no longer steal the ripening corn; few laughing jackasses survive. The only country that has not changed much is on the eastern scarp of the Main ~~Ridge~~ Range, where rough sandstone and granite replace the volcanic rocks which produced the rich farm soils.

Friday Jan. 16:

Back on the job. Collected mails at the Museum and Gardens. Looked through a collection of herbarium specimens made by Freddie Whitehouse at Arakun, on the west coast of Cape York Peninsula, last year. Mostly poor scraps, but they throw interesting light on the flora. Indication of a dry type of closed vegetation of rain-forest species (Pterocarpus, Mimusops, Buchanania, Syzygium, Capparidaceae, Delabria, etc), besides savanna country. A collection of about 1000 numbers of scrappy material collected by Whitehouse on his military reconnaissance in 1942 was determined by Francis and incorporated in the Herbarium without listing of the names or publication of a report. White says the collection contained a cumber of new records for Australia. It is high time that real work was done on the C. Y. flora.

Called on Mr. Arthur Bell, new Under Secretary of the Dept. of Agriculture & Stock to get advance information as to how we will stand re permits to export zoological collections when the time comes to ship them home. Our permit to collect "fauna" does not cover this. Very successful interview. Subject to Commonwealth laws or regulations governing export of specimens and quarantine clearance on behalf of country of destination, our Queensland permit to export will be in conformity with our collecting permit. The Collector of Customs (Commonwealth) has already assured me that his department will OK anything sanctioned by the Queensland authorities. Which means we can collect and export collections of "fauna" without restriction. The Queensland Govt. will waive their right under the Protection Act to charge royalty on skins collected. I will be granted an open permit to collect the considerable list of protected

plants (many ferns, orchids, palms, etc.). A memo re export permits and royalties will be drawn up and filed for information of officers administering the Act. If we ship from Cairns, S. E. Stephens, senior agricultural inspector there, will issue export permits. Knowledge of treatment of such collectors as Wilkins and Raven in earlier years, and the very severely limiting restrictions placed on them in Queensland, coupled with the gloomy predictions of Mack last week, had me a bit doubtful as to what to expect for our expedition. As it turns out we are writing our own ticket.

In return for all this, we (1) Give Queensland Museum paratypes of new mammals we may discover; (2) Take a Queensland Museum man with us in the field for a month or two (museum paying his expense);)3) Give Queensland Herbarium a full set of the plants collected, and types of new species which may be described by White or his staff; (4) Collect cuttings of Saccharum spontaneum for Qld. Dept. of Agriculture, or if this not practicable, pinpoint locations where this wild sugarcane occurs so that Govt. will be able to send an officer to the Peninsula to collect it later.

Saccharum spontaneum is wanted for sugarcane breeding experiments. An abundant grass in New Guinea; not yet recorded for eastern Australia, though Stan Blake found it on the Daly River, Northern Territory, last year.

Called at Dept. of Lands to pay for some maps they sent us last year. Grenning, Director of Forests, from whom I want permission to collect on forest reserves, was out of his office. Talked with W. M. McLean, Under Secretary; F. Matthews, Secretary, Land Administration Board; and John Connolly, Asst. Sec. Land Admin. Board. Department officers in the North will cooperate in every way possible.

A surprising percentage of senior govt. officers were born in the North. They are much interested in what goes on there. They like to talk about it, and as my calls often coincide with the recess for morning or afternoon tea, a good deal of time is taken up in making official contacts.

At the Tourist Bureau, where I inquired re rail and air reservations for Cairns, I came across a man whose father was a policeman at Coen, and came with a bag full of gift publications on the State.

At the Immigration Dept. was given my alien registration card, numbered "Q.1," the first to be issued in Queensland under the new Act requiring the registration of all aliens.

Saturday Jan. 17:

On correspondence. Letters to Marie; Geoff Tate; Rev. H. M. R. Rupp, the Australian orchid specialist; R. A. Hunt, who has sent a copy of his recently published Key to the Identification of Australian Snakes; Rev. H. F. Johnson of Lockhart River Mission; and the agents of a 150-ton vessel, the "Yalata", trading between Cairns and Thursday Island. The agents of the Yalata wrote about our transportation up the Peninsula Coast, and offered to divert the vessel from its regular run to meet our requirements.

The "Yalata" gives us a second string to work on if the John Burke steamers should fail us.

Hunt's key, published in the Victorian Naturalist last month, includes notes on the venomousness, color, scalation and distribution of 79 spp. and 7 varieties of Australian snakes. Of these only six are non-venomous. It is reassuring to note that many of the venomous ones are considered harmless or not dangerous. Seven are called deadly. The Commonwealth Laboratories produce a Tiger Snake Anti-venene that is effective against most or all of the venomous species. We will have some of this on Cape York.

Sunday Jan. 18:

To Southport to see my brother Alan. A 60-mile train journey taking about 1 hr. 40 minutes. As usual the passengers opened all the windows and let in great quantities of cinders from the coal-burning locomotive. Southport is on a stretch of South Queensland coast which promoters have visions of making into an Australian Florida. It is in about the same latitude south that Florida's Palm Beach is north, although the climate, being continental, is perhaps colder. A sand dune coast with fine surfing beaches popular with Brisbane people in the summer months. The present town development occupies only a fraction of the good high building land behind the beaches. There are no smelly mangrove flats. Many fine pleasure launches in the estuary of the Nerang River, which enters the sea here. One modern hotel - Surfer's Paradise Hotel. Petrol rationing is hitting seaside resorts hard. Few cars about.

Southport and that stretch of coast has been in the newa lately as a source of critical rare minerals. For several years past there has been small scale recovery from the beach sands of Zircon (used for hardening steel, making highly heat resistant vitreous enamels, etc.), rutile (used for hardening steel, making colored tiles, and as a base for chemical smoke for war purposes) and small quantities of radio-active thorium.

Monday Jan. 19:

First call of day was to U. S. Consul Peck, who will arrange for me to see the Premier, Mr. Hanlon, during the week. Call at Bank New South Wales, where I met the manager, Mr. Pickering, and later arranged with the travel agent of the Bank for my journey north to Cairns. Not able to get a train reservation (trains crowded and reservations must be made two weeks in advance) so decided to go by air and got the last available seat on the ANA (Australian National Lines) plane leaving Brisbane 2 PM Monday 266h. Fare L.13/13/9 and they allow only 35 lbs free baggage.

Called at Sub-Department of Forestry, Dept. of Public Lands, re permit to collect on forest reserves. V. Grenning, the Director, away on annual leave. Saw A. R. Trist, Deputy Director, his brother C. J. Trist, Secretary, and Mr. Dawson, in charge of northern forests. Long talk from which I got some good information from Dawson on rain-forests between Daintree River and Cooktown (No timber now being cut in Shipton's Flat area, but some of the many timber roads in rainforest go up to about 2500 ft. on slopes of Mt. Finnegan. Timber now being cut in rainforests of Mt. Boolbun North and hauled by tractors to a sawmill on the lower Bloomfield. A road trafficable for lorries goes south from Cooktown to Mt. Poverty tin workings; plenty of packers (pack horses) available to transport gear from Mt. Poverty to Mt. Boolbun North. A Danish couple named Olafson run a boarding house on the lower Bloomfield. A small launch from the Bloomfield meets the big launch that runs regularly between Cooktown and Cairns. Eyres, now Forest Overseer at Mareeba, was stationed several years in Cooktown area and is thoroughly familiar with country south of there).

A. R. Trist a bluff, open air type, much influenced by his brother, C. J., who is very much of the stuffy civil service type of senior office official. C. J. handled the matter of permits. No trouble about permit to collect anything from "State Forests, Timber Reserves and Crown lands in North Queensland." National Parks were another matter. Could not get permission to collect zoological materials in these. C. J. began by telling me the flora of the National Parks (including the 80,000 acre Mt. Bartel Frere Park) was well known and that White could tell us all about it. Was able to convince him that this is not so, and was given permission to collect botanical specimens "provided that the removal of such specimens will not appreciably affect the survival of the species in the locality concerned."

The type locality of Austrobaileya, a plant I particularly want to get, is at Boonjie, on the edge of the Bartle Frere Park. There are no national parks on any part of the mainland of Cape York.

A. R. Trist will write Owens, District Forester, Atherton, and Eyers of Mareeba, instructing them to assist us.

Dawson has seen the marsupial tiger - near Atherton. It was walking along a log, in rain forest, in daylight. Heavily built, body about 2 feet long, front legs shorter than hind, weight perhaps 40 pounds. Thought it was a dog on first sight. Should judge Dawson thoroughly reliable.

Called again on Whitehouse at the University, and met Dr. Bryan (head of Geology Dept.), Dr. Hill (Woman), and Mr. Jones, of the faculty, at the usual afternoon tea. Whitehouse had been away on a field trip and had not finished sorting his air photos of Cape York Peninsula. Had hundreds of them spread on tables in a lecture room. Gave me 21 duplicate prints of very instructive shots showing character of country and vegetation. Will have prints made of perhaps # 30 more selected by me, and present them to us. These are Australian Air Force photos. Also got from Whitehouse a colored regional map of the Peninsula, prepared during the war, and showing regions classified according to soil, contour and vegetation. This may and his Reconnaissance report to the Army were deon in 6 weeks of work and are not claimed to be more than very roughly accurate.

Amongst mails at White's office were letters from Marie, George Tate, and E. Deverell, owner of the launch "Seabird" at Innisfall, Deverell offers information on boats we could hire for Cape York.

George wrote from Mirrabooka (562 miles), Western Railway. Country dry and mammals hard to get out there. Expected to arrive in Dalby and go out to the Bunya Mts. on the 15th and get back to Brisbane about the 21st. Wanted to visit the Canarvon Range too, but time too short for that.

Tuesday Jan. 20:

Business day began with a call at the Bank of N.S.W. on personal business. Then to the offices of the Queensland Main Roads Commission to call on J. E. England, Secretary, who answered some of our early inquiries on Cape York through the Aust. Consulate-General in New York. Nice old boy whose daughter, a graduate biology student at Queensland University, is specializing in marsupiology. (That's a new ology to me). Took up with England the matter of gasoline for our Cape York work. The Liquid Fuel Control Board, handling gas rationing, is staffed by executives seconded from the Main Roads Commission. Did not have much idea how much gas to ask for, for use in our hired vehicles, but when England suggested 150 gallons a month I allowed that ought to be enough. It will be a liberal allowance. I am to write an official request to the LFCB for that quantity; the ticket to be forwarded to our Cairns agents monthly. We are to return unused ration tickets.

After England I saw Kemp, head of the Main Roads Commission. A very experienced and able man who, during the war, was placed in charge of all military construction in Queensland; has visited the U. S. recently to study road problems. (England organized wartime fuel rationing for all Australia). Kemp has been on inspection tours all over Cape York Peninsula, partly by air. Gave me some useful information on the more southerly parts. Also gave me copy of a fine 1 inch/ 1 mile map of country between Cooktown and the Daintree River. May based on RAAF air survey photos and shows types of vegetation in color. Will write his senior officer at Cairns, instructing him to help us, and, if we need it, provide transport for our party from Portland Roads to Iron Range. A Main Roads party is now repairing the road between these two points, and will be there through the wet season.

Afternoon spent at Victoria Barracks (Army H.Q. for Queensland). Met Major General Nimmo (G.O.C.), Colonel , Major McBride (1/c Intelligence), Lt. Hurren and Sergeant Chalk (map section of Survey. Major Lockwood A/D Survey was away.) All very pleasant people. Nimmo was bron on a cattle station in the Gulf country and has been there recently to see the home property (I knew his brother years ago). McBride probably a recent arrival from England. Spent a couple of hours with Hurren and Chalk, looking through files of maps and selecting those we can use. Will go back tomorrow to see their air photos.

Lunch with R. Oldham, an old resident of Port Moresby. Found him working behind the counter at Harrington's photo shop. An excellent photographer, and a keen amateru naturalist. Has specialized in the collection of cowrie shells, of which he has nearly 200 species from various parts of the country.

Oldham informed me that Goodfellow is not collecting in Madagascar.

Wednesday Jan. 21:

A good part of the morning used up in getting in touch with the RAAF command and finding out the position re military control of Cape York airfields. The RAAF has gone into a decline in parts north of Sydney, where I find the officer commanding all the north is stationed. Queensland is split into at least three minor commands. Group Capt. Douglas at Amberley, some 30 miles west of Brisbane; Group Capt. Pierce at Townsville and commanding the east side of the Cape York Peninsula; and Group Capt. Fyfe at Darwin and commanding the west side of the Peninsula. The Amberley field is on a telephone line in the 45 minute delay category. Finally got hold of Douglas, and was referred by him to Pierce in Townsville. This means I shall have to break my journey at Townsville en route Cairns Monday. Douglas says Jacky-Jacky airfield is still under military control.

Looked over Cape York air photos at Victoria Barracks and finalized a list of maps we need. Will buy the maps of Watson Ferguson & Co. in town. Most Australian military maps are obtainable from this firm. Afternoon tea with McBride of Intelligence, who has his back up about the tactics of the press. The press is hostile to Government and distorts information from the military press liason officer in efforts to discredit Government leaders.

The military maps are in color and show types of vegetation as they interest military men. That is, they show different types of cover, with, as a rule, specific designations for rain-forest. Saw some of the air photos on which the maps are based and am not so sure that the vegetation has always been correctly interpreted. Still, they are most useful maps and far better than anything we have.

An interesting new contact was Mr. C. Ogilvie, a hydrologist on the staff of the Bureau of Investigation, Lands Dept. A rugged, unconventional chap, past middle age, who spends his vacations roaming remote parts of the north on a push bike. Was attached to MacArthur's staff in Dutch New Guinea (Hollandia, Wake) as adviser on water supply and timber. On one of his bike trips, tow years ago, he visited Iron Range. Got little new information from him.

Thursday Jan. 22:

Received our plant-collecting permit from Dept. Agriculture, and a special licence for use of a monthly 150 gal. of gas from the Fuel Control Board. Watson Ferguson & Co. were able to supply most of the maps we need and will have the others tomorrow. Am getting two sets. It would not be surprising if these military maps are taken off the market at any time.

Calls on R. W. Peters, Cotton Section, Dept. of Agriculture, and formerly director of Queensland Acclimatization Spciety. Also Dr. D. A. Herbert, Prof. of Botany and acting head of Biology Dept. at the University.

Saw L. J. Webb, Division of Plant Industry, Council for Scientific and Industrial Research (Sommonwealth), who is carrying out a survey of the Queensland flora for alkaloids.

An able fellow who, since 1944, has spot-tested over 1500 species. Rainforest plants especially promising; 20% pf northern spp. have yielded alkaloids and at least 10% of the spp. have yielded appreciable quantities. A startling new alkaloid, one of the most toxic known, has been isolated from Cryptocarya pleurosperma. Starting work on a new "anti-cancer plant" project.

Webb showed me copy of a letter which Dr. C. Barnard, Chief, CSIR Div. of Plant Industry, wrote the Commonwealth Government last September, suggesting that we be asked to contribute a set of Cape York herbarium material to the Canberra herbarium, and cooperate with the CSIR by collecting plant materials for alkaloid spot-testing. Apparently the suggestion was not approved by Canberra, for we heard nothing of it in the U.S. As phrased it did look a bit stiff.

A twig the size of a herbarium specimen, and a small piece of bark, are all the requirements for an alkaloid spot-test. The project is one purely for the benefit of humanity and should be helped. Have therefore offered to send Webb some materials, chiefly of a few of the families that have been found most promising (Rubiaceae), Rutaceae, Lauraceae, etc.).

Friday Jan. 23:

A long business day started with a visit to Victoria Barracks to return to McBride a copy of the October "Walkabout" containing an illustrated article on Cape York Peninsula by Whitehouse. Had it on loan from the officer's mess.

At Dept. of Agriculture left with Peters, in absence of the chief of experiment stations, a packet of seeds of the Mwera Hill dwarf-bush tomato from Nyasaland (gift from the New York Botanical Garden). Also talked with Wells, chief of Cotton Section; an American who organized his section and has been here over 20 years. Wells interested in getting seeds of Gossypium Sturtii for breeding experiments. Says it is known from the west side of Gulf of Carpentaria and might grow on Cape York. Doubt this, as it is a plant of dry central Australia.

Called on Mr. C. O'Leary, Director of Native Affairs and had a fruitful talk with him. Says the various tribes or divisions of the C.M. aboriginal population are now at peace with each other. Natives on one district are no longer afraid of being speared or having a bone pointed at them when they go into strange territory. Therefore recommends that we select a few good boys on the Tip, sign them on, and take them with us right through the trip. Also believes I could get a Torres Straits islander for my own assistant. These suggestions are well worth consideration. It would be a great advantage to have permanent black boys trained to collect and understanding our ways and objects. The consensus of opinion confirms my own that it will be no easy to get a suitable white assistant for my work. (The applicants writing for jobs do not promise well, although two have had biological training). O'Leary will instruct his Thursday Island office (Percy Jensen, Protector of Islanders) to assist by getting us boys and providing transport. Government launch transport between T. I. and the mainland would save us considerable expense. O'Leary was formerly stationed in the Torres Straits islands. Is therefore a practical man. Estimates an "abo" population of about 2000, north of Cooktown on the Peninsula. Practically all are in contact with one or other of the missions on the coast. The two missions farthest north - Cowal Creek and Mutee - are under direct control by Government; the west coast missions are Presbyterian, the one mission on the far east coast

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[illegible]

is Anglican. O'Leary does not seem to have a very good opinion of the east coast natives.

An interesting interview with the Premier, Mr. E. J. Hanlon (arranged by U. S. Consul). A capable, well informed man of strong character. Started life as a railway porter, but not even the strongly anti-labor press denies his ability and progressiveness. Much interested in the Australian aboriginal, and especially the primitive and little known people of Bentinck Island, Gulf of Carpentaria. Visited these people shortly before World War II and had some difficulty in getting in close contact with them. Says that in several landings on the island they saw no huts or shelters of any kind. Natives camped in shelter of long grass behind the beach (Hanlon's party did not penetrate the swampy interior). Live mainly on basking sharks, pandanus fruits, and the fruits of a small tree. The hafts of their crude spears are made of several short lengths of stick joined together. Spears notched but nor barbed. Hanlon would like to have Bentinck islanders studied by a good anthropologist. I suggested a man and wife for the job , and that the work be done soon. The chance introduction of a white man's disease could wipe them out in short time. Hanlon says that during the war some Air Force men landed on neighboring Sweers Island, came in contact with some visiting Bentinck islanders and seeing naked savages advancing toward them, opened fire and killed one of the blacks. Study of the Bentinck people looks like an interesting job for someone.

This job will not go to Donald Thompson. Thompson studied the natives of west coast of C. Y. Peninsula, does a good bit of writing to the papers, and is not in good repute. Did an article recently on our expedition. Said wallabies occur on Torres Straits Islands. O'Leary asserts wallabies not indigenous on these islands. There are wallabies on Badu Island, but these were introduced from the Mitchell River about 10 years ago by Samuel Kiwat, a teacher of St. Paul's Mission.

Called on Mr. J. A. Sewell, Director of Local Government, and Mayor of Thursday Island pro tem. Courtesy call to thank him for information on tip of Peninsula supplied some time ago through C. T. White. This information came from Mr. Loney, an officer of Sewell's stationed at T. I.

Last visit of day was to American Consulate, to thank Peck for assistance. Not that he has done much. A new man to this post; formerly at Lagos; not very well informed; pleasant fellow but no but no world beater.

Dinner and evening with George Tate, who got in from the west today. Looks well and is satisfied with the reconnaissance aspects of his trip. Had splendid cooperation from western people. Says country on the Warrego River, about Offham, greatly altered by sheep and their owners, and most of the original mammals no longer to be found. Lots of rabbits. Found the Bunya Mts. very interesting. Stayed several days at a rest house near the summit. Hunted for fossils with Mr. Jack, mayor of Dalby, and well known in this field. Jack presented him with good materials of two fossil beasts for the American Museum. Got 30 specimens of mammals on the trip - about 7 species; mostly from Bunya Mts.

Almost forgot to record a visit today to the combined office and home of D. A. O'Brien, Hon. Gen. Sec., Royal Geographic Society of Australasia (Queensland). Soon after my arrival O'Brien wrote me about a report the Society had of stone arches in the Caroline Islands. Today he talked without pause of this and various activities and past history of the Society. A retired Civil servant, eccentric if not worse, who has decided to devote the rest of his life to his present work. Will accept no pay. In two years has boosted membership from 40 to over 700. The late J. P. Thompson, found-

dr and for many years secretary of the Society, fell out with everyone toward the end, and for a long time succeeded in having all the meager income of the Society voted to him as honorariums. The old man had nothing else to live on. (O'Brien adored Thomson; others I know considered him a pompous fakir).

Monday, Jan. 26:
Before leaving for Brisbane I met George at his hotel (Lenons) and the two of us went to the Botanic Garden; George to ask White's advice on localities to visit on his independent collecting trip, I to meet J. L. Wassell, who is back from a trip out of town and came to the Garden especially to meet me. W. D. Francis, back from annual vacation, and looking very brown and fit, was also there to see me. This is a public holiday - Australia Day - and there was a procession in town.

Wassell, a tall balging young chap who impressed me very favorably. Should make a good expedition man to work in a party or alone. ~~Ixxxxx~~ Is collector for Dept. of Biology of the Queensland University. Has a special interest in fresh water fishes. Was in the Coen area late in 1947 collecting mainly crocodiles and other reptiles for laboratory use. Recommends Blue Mts. as a good base for us, with packhorse trails leading to edge of Rocky Scrub, a big permanent water-hole, etc. Wassell is son-in-law of Thomson of Coen. Has one or more children.

Left the city by airline bus (ANA)at 1:15 and took off from Archer field Airport 2:15; made a non-stop flight and arrived Townsville (Garbut Field) 6:40 P.M. Very thick weather. Saw only glimpses of the 750 miles of coast country flown over.

The flying part of the ANA service is good; the ground service lousy ax-cept at Archer field. At the Brisbane pick-up station, you lug your own baggage from taxi to scales - taxi drivers don't carry bags and there was no porter. A very casual and decidedly uncivil clerk weighs your bags and collects on weight over 35 lbs. You yourself, brief case, etc. are not weighed anywhere. If you wish to leave your camera and field glasses until pick-up time, as I did, you are told airily to put them on a table where they are within reach and open to theft by anyone in town. Excellent desk staffand an efficient atmosphere at Archer field terminal. Good stewardess and good cold food well served on the plane. At Townsville you are on your own. Wait a while in the little terminal empty tobacco tins serve as ashtrays. Get in a bus, the driver of which says not a word. Does not say where he is going, or ask where you want to go. Just drives. The handle was off the bus door and had to be picked up off the floor and applied to the right place whenever someone wanted to get off.

Finally I was delivered to the Queens Hotel, on the explanade. An inposing brick building with canonaded (sic) front; run down and dirty inside and alive with cockroaches. My room has soiled plaster walls, worn linoleum floor covering. The sink has been wrenched from the wall and half of one tap is missing. The toilets and bathrooms are on a back verandah and there is no light for the guidance of strangers. Someone had been sick in one of the two toilets provided for all the male inhabitants of _____ rooms. I have no key for my room, nor, apparently does anyone else. Yet, downstairs, in the big open lounge facing the sea, the guests look and bahave like the guests of a first-class hotel anywhere else. This is the best hotel in Townsville, "Capital City of the North".

Tuesday Jan. 27:

A hot, steamy morning after yesterday's rains. Scarcely a stir in the air even on the great wide verandah on which my room opens, and from which one looks through coconut palms and shady trees to the sea. The big trees are figs and rain trees (Pithecelobium). Saw a big flying fox, apparently a scout, exploring the fig trees last night.

Called on Group Captain Pierce, Air Officer Commanding North-eastern Area. His area takes in eastern New Guinea as well as the eastern part of Cape York Peninsula. Quite an office staff. Was disappointed to find that Iron Range field has been completely abandonedby the RAAF and all buildings sold and removed from the area. At Jacky-Jacky only a caretaker is stationed, looking after some buildings that remain. I thought we might find buildings to camp in at Iron Range, and perhaps get some assistance in transport in the Jacky-Jacky area. Pierce offers transport in the event any of our party have to be evacuated through illness, if we should be stranded without supplies anywhere, etc. Nice chap.

Townsville has more the atmosphere and appearance of an inland pastoral town than of a coast town, although it is a port of considerable importance. Looks as if some business men took over a bit of coast, put up some buildings and wharves as a depot for their outback sheep and cattle properties, and left it at that. An ugly town. Little has been done to develop the natural advantages of the place, less to make it attractive or convenient for a stranger. For example, there are no street signs, and no names on public buildings. You have to inquire your way around in Townsville, or, if you are lucky enough to find one, hire a taxe. Taxi drivers seem to feel that their job is somehwat beneath them. Perhaps as balm to their pride, they levy a stiff toll on their fares, to wit 2/6 minimum, or 50 cents at par.

Left Townsville 12:15 PM and arrived Cairns airport 1:25. Bad weather and saw little of the country. Our DC3 flew in cloud much of the time. Got a broken view of Palm Island (Patches of light rain forest in the prevailing savanna), and as we approached Cairns, a glimpse of the dark high peaks of the Bellenden Ker Range sticking out above the clouds and, below us through the overcast, rain drenched sugar fields on rain forest land along the Tully River. Cairns airport, built on a reclaimed mangrove flat, was almost awash with rainwater and an exceptionally high tide backed up by southeast winds. Air terminal nicely kept, with green lawn, gay shrubs, tree ferns, and tropical orchids. It's too bad that the ANA pick-up bus was such a wreck. Its roof kept the sun out but not the rain. Water dripped down on every seat. The 3-ply lining was swollen and buckled, and leaving the walls. Found upon my arrival that part of my baggage was left behind in Townsville by mistake or inefficiency. A black box containing all my film. The palne was only half loaded.

Dupain of Burns Philp sent a man to meet me, and had a room reserved at Hides Hotel (managed by Mr. Henderson, owned by Burns Philp). For a big corner room with bath,but no toilet, the rate is 22/6 per day of 6/5/- per week, including meals. The hotel is very well kept, has a fine dining room, good lounge, and the food is excellent.

Dupain ill with fever, Main Roads man (Mr. Gallop) who was going to call at the hotel did not turn up, so got no business done in afternoon. Was visited at hotel by Capt. E. Smith, owner and master of the M. V. Lochiel (Smith formerly cartographic officer of the survey ship H.M.A.S. Moresby). Offers his vessel for charter at L. 120 per week all found, including fuel, provisions, crew and insurance. Also willing to carry us and cargo at ruling

rates on his regular run. Weekly service Cairns, Cooktown, Annie River and return, with approximately monthly calls at Bloomfield River to pick up sawn lumber. The Lochiel is 52 ft. long and draws 3½ ft. forward and 5½ ft aft. A trawler type vessel of which six were built for the British Government for secret landings during the war. A cockroachy tub carrying crew of 2 Singhalese and 1 Australian abo. Could be useful to us for short moves along the coast.

Wed. Jan. 28:

At B.P.'s, Dupain very cordial, offered every help and called in various heads of departments for consultation on requirements. No trouble anticipated in getting us all the ~~xxxx~~ stores we want except rice, which can only be supplies on license for feeding native labor. We can get the billy cans, bedourie ovens, and other special Australian items of field equipment we need. Will go into details with heads of departments tomorrow.

At Bank of New South Wales, talked with Mr. Smith (Acting Manager, relieving from Atherton), Mr. Turner (accountant), and Mr. Robertson (head teller). Our first draft of $2500 has arrived from New York. Went through the routine of opening an account.

Called on S. E. Stephens, Borticulturist and senior man in the local office of the Dept. of Agriculture, also President, North Queensland Field Naturalists Club. He is the officer who will issue our export permits. Have corresponded with him for some time re Cape York. Wants me to lecture to the Club.

Also called on Mr. Wyer, longtime Secretary of the Cairns Harbour Board, and secretary of the Naturalists Club. Have known him for years.

Have a reservation on plane for Thursday Island for February 5th.

Dr. Flecker, founder of the Naturalists Club, called for me about four thirty and we went out to Edge Hill, about 3 miles from the city, to see the herbarium. The Club has housed its collections in a building at the city nurseries; is now moving them into other temporary quarters in town, pending the construction of a museum. Museum will be built with outside help as a war memorial.

Flecker says the Naturalists Club herbarium contains about 4500 species and about 10,000 sheets. Specimens all mounted on sheets of standard size and poisoned by dipping in a saturated solution of boric acid (in alcohol). This poisoning method seemingly very effective. Bulk of collection from coastal parts of north Queensland; some from southern parts of Australia, gained by exchange. Determinations of phanerogams mostly by White and Blake; lower groups by staff of Melbourne Herbarium (mosses, Fungi, algae). White has said that Flecker has named many of the specimens himself by matching new collections with material determined in Brisbane. Names should therefore be accepted with caution. The notation "determimivit White (or Blake)" does not necessarily mean that these botanists have seen the specimen; ~~ix~~ it might be one "matched" by Flecker. Flecker has collected the great bulk of the material in the herbarium. Some of it from difficult localities such as summit of Bellenden Ker and of Thornton Peak.

Flecker regarded as the chief menace in North Queensland for visiting botanists. Poor collector with no sense of direction and an inflated ego. Wants to come with us. Is getting old and forgetful. Wears half-moon glasses

and turns sideways to see properly. Drives all over the road. He does know his herbarium. Seems familiar with every sheet.

Thursday Jan. 29:

A good part of the morning spent at B. P.'s. Cutmore of the merchandising department took me through the stores and warehouses to see stock and check on requirements. Goods of most lines are in fair to good supply. We are getting special consideration and need anticipate no trouble in getting everything except rice. We could get rice on special permit, no doubt, but feel we ought not to ask for privileges of that kind. The people have had no rice for years.

Have asked B.P. to try to book us return passages on a ship leaving Brisbane or Sydney for New York about the middle to the end of October. Also arranged for train reservations for Van and Geoff from Brisbane to Cairns. Sleeper bookings have to be made 2 weeks in advance.

B.P.'s have offered us a corner in a building which will be just right for storage and work space. A new building of galvanized iron, with high concrete floor and excellent lighting, recently bought from the RAAF. It will be a dry safe place to store collections as we send them down from the Peninsula.

Have a seat on a special plane leaving for Thursday Island on the morning of Feb. 2nd. The special is being put on to carry freight and will take only two passengers, myself and a Torres Strait pilot. The regular weekly plane leaves here Thursdays, but traffic is heavy and specials are flown every week. The ANA people out to be helpful (Smythe, local manager, Wright, traffic manager), Wright was stationed on the Peninsula with the RAAF during the war and knows conditions there. Have letters of introduction to all ANA agents on the Peninsula, instructing them to book me anywhere I want to go and charge to Burns Philp.

Flecker wants to interest us in a check list of North Queensland plants which has been prepared by himself and others of the Naturalists Club. A compilation from the literature and from data in the Club herbarium. Localities, collectors, and flowering dates given. The thing would have value, but is based on very limited sources of information. In manuscript, and could be copied (typed) for perhaps L10. Am afraid Flecker is going to live up to his reputation of being a nuisance.

Dupain took me to the Rotary Club dinner in the evening, where Stephens gave a lecture on growth promoting substances (hormones). I have been asked to give a talk at a later date.

Gilbert Bates, Senior Adviser, Sugar Experimental Stations, called in the evening and we talked North Queensland and pored over maps to a late hour. Bates a stocky little chap of tremendous energy. Was born in Cairns 50 years ago and has been stationed here 25 years. Travels all over the country south of Cooktown, is a keen observer and naturalist (especially interested in orchids). Much interested in establishing sugar culture on the alluvial lands which are extensively developed on the rivers of Princess Charlotte Bay. Only a few cattle on this country now.

(Go to page 36 - p. 35 left out in copying because two pages of original were in longhand.)

Friday, Jan. 30

Mr. R. D. Gallop, Divisional Engineer, Main Roads Commission, drove me out to his headquarters some 3 miles out of town, and we spent most of the morning talking of the Peninsula and studying maps. Gallop a very fine type of middle aged man, with large experience in surveying and building roads in the North. Drove from Laura to Coen and Portland Roads late last year in an army weapon carrier (= military version of Dodge Power Wagon), which he swears by for bush travel. Main Roads will spend L.20,000 this year on roads between Portland Roads and Coen (or Laura). Using surplus military materials, permanent bridges will be built over creeks, and the road paved with bitumen, from P.R. to Iron Range air drome.

A Main Roads party of about 20 men, with equipment, will leave Cairns by boat for Portland Roads February 10. They will spend the wet season working between P.R. and Iron Range, then move inland across the Pascoe. Fresh food, including butter, will be flown to them from Cairns; beef from Coen. Gallop, on instructions from Kemp, offers to transport us from P.R. to wherever we decide to camp in the Iron Range area.

Very glad of the transportation offer, as Gallop tells me that Doug. Fisher, on whom I was more or less relying to move us to Iron Range, is quite unreliable and of not too good reputation in business dealings. Fisher a World War I air pilot, who married the widow of a Portland Roads miner (Mrs. Fisher a trained nurse). Keeps a store and is Shell agent at P.R., and has two trucks (in poor repair). Charges exhorbitant prices at his store. Most unpopular with local miners and road construction men. It appears that some of the lonely miners around there had stills, until the police closed them down on Fisher's complaint. Now Fisher sells grog, to blacks as well as whites, for three pounds per bottle. So much for Fisher. "A weak reed," says Gallop.

Gallop says Fisher has several ex-military buildings at P.R. which would be suitable for storage of our stuff. Some former army buildings, bought by Fisher, are still standing at Iron Range. Gallop thought of renting some for his roads camp, but has decided to have no part of Fisher. G. assures me that when he was at Iron Range recently part of the military hospital was still standing. Pierce, of the RAAF, told me Monday that all military buildings in the area had been removed by purchasers. From information I have the hospital would make an excellent base camp for our work. It stands near the Claudie River in a savanna-forest patch amid rainforest.

In Bate's company, visited the Lands Office in afternoon to see Mr. E.C.J. Muir, Land Commissioner. Man of strong, open character and great experience in the North. As a military officer, on special service, he walked or drove over the whole tip of the Peninsula during the war. Visited Thursday Is. and the Tip only a few weeks ago. Says we should be able to travel over any of the roads on the Tip during the wet season.

Muir says the former American Army sawmill formerly at Mutee Head has been moved to Lockerbie. Mill owned by Tom Holland, one of whose sons married Sharret Cowling of New Guinea. Holland has owned Lockerbie for 40 years; knows country well. Lockerbie is on western edge of biggest body of rain-forest on the Tip. Looks like the best place for our main base on the Tip. Timber from mill is shipped to T.I. from Red Is. Point. Beef for T.I. is killed at Red Island Point, and there is a weekly boat between the two places. Muir says the rainforests of the Tip look "younger" than those of the Cairns district, are composed of mainly small trees, and there is not much undergrowth. "Pacific Maple" (Flindersia sp.?) a common large tree.

Jetty Joe McLaughlin, who recently gave up his job as wharfkeeper at Portland Rds. and applied for job as our cook, is now barman at a Thursday Is. pub. A regular booze hound according to Gallop. We will look for another cook.

Met Mr. Harold Armstrong, local manager of C.O.D., a voluntary cooperative of fruit and vegetable growers operating with the blessing of the Qld. government. Has been

Jan. 30 - (Cont'd)

established over 20 years and has membership of 40% to 50% of growers. The govt. guarantees their operational overdraft. COD (Committee of Direction of Fruit Marketing) has been given control of all canning of fruits and vegetables. Among its aims and functions are the improvement of marketing methods, and the distribution of products direct from the grower to the retailer, for the benefit of both grower and consumer. Have from Armstrong copies of a publication (1946) dealing with the history and organization of COD.

Page 3a - (Contd)

established by - 20 years and has had growth of 10% to 30% of growers. The co-operators have their operational overheads. UPC (Committee of Production of Fruit Growing) has been given control of all growing of fruits and vegetables. Improvements and functions are the improvement of marketing methods, and the distribution of products direct from the grower to the retailer, for the benefit of both grower and consumer. Mr. van Greyen spoke of a publication (1968) dealing with the history and organization of UPC.

Archbold Cape York Expedition

L. J. Brass. Flight notes Cairns to Horn Island, ANA Dragon Rapide plane, Pilot Bonney, February 2, 1948.

Ground speed about 125 mph.
Observer sitting on starboard side of plane.

8.57 AM Take off Cairns.

9.05 Mountains close inland. Savanna forest with clumps rain forest on slopes.

9.15 Few green canefields on plain back from coast. Port Douglas abeam. Yellow sand beach; rocky point. Rain forest increases up slopes.

9.18 Mouth Daintree River.

9.55 Arrived Cooktown.

10.11 Left Cooktown

10.21 Dry country since Cooktown; savanna forest with small bits rain forest on higher hills and on streams.

10.26 Over Bridge Ck. Open savanna, much bare yellow and red grassless soil. Teatree? on creeks.

10.36. Over Jack River. Plenty water.

10.44 To left 1 mile, Jack's Lakes. Country savanna forest (various). Little grass cince ca. leaving coastal fall.

10.52 Country improving; green flats with no trees; short grass.

10.55 Normanby River? (Maze of winding streams yellow water).

10.58 2 photos Normanby, nearly treeless grass plains; looping rivers.

10.58 Edge salt pans. Photo.

11.00 Photo coast and river mouth.

11.02 Directly over mouth of Saltwater Ck.

11.13 Photo Cliff Islands. Mostly bare grass, with mangrove edges on big island.

11.15 Over coast.

11.19 Over Balclutha Ck. Dry open savanna forest ridges; bigger timber on creek flats. Mangroves behind sand beach, & salt flats inland.

11.23 Over Stewart River. Very open savanna forest low ridges. Savanna rather than savanna forest.

11.26 Photo open savanna forest under range.

11.28 Edge range (Main Divide). Thin rain forest in gullies. Photo.

[illegible] Transportation Corporation

[illegible] Miami motor launches [illegible] Bare Island, the [illegible] Marine Plant, Miami Beach, February 8, 1940.

Average speed [illegible] m.p.h.
Observer riding in [illegible] side of plane.

[illegible] Table of Matrix:

[illegible] Impounded [illegible] Lake Tohopekaliga, [illegible] also at.

[illegible] Spring [illegible] Yellow and Black, Yellow Pollen, Yellow Yellow [illegible]

[illegible] Lotus Pollen Grass.

[illegible] Bulbs [illegible]

[illegible] Bulb Cover.

[illegible] Top covering [illegible] Cover [illegible] Bulbs [illegible] Bulbs and [illegible]

[illegible] Arrange [illegible] [illegible] Bulbs [illegible] Bulbs [illegible]

[illegible] Water [illegible] Bulbs [illegible]

[illegible] Lots [illegible] Bulbs [illegible] Bulbs [illegible] Bulbs [illegible]

[illegible] Bulbs [illegible] Bulbs [illegible] Bulbs [illegible]

[illegible] Bulbs [illegible] Bulbs [illegible]

[illegible] Bulbs [illegible]

[illegible] Bulbs [illegible]

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[illegible] Bulbs [illegible]

[illegible] Bulbs [illegible]

[illegible] Bulbs [illegible] Bulbs [illegible] Island.

[illegible] Bulbs [illegible]

[illegible] Bulbs [illegible] Bulbs [illegible] Bulbs [illegible]

[illegible] Bulbs [illegible] Bulbs [illegible] Bulbs [illegible]

[illegible] Photo [illegible] Bulbs [illegible]

[illegible] Bulbs [illegible] Bulbs [illegible] Bulbs [illegible]

11.31 Photo about north over edge range. Savanna forest and rain forest.

11.34 Tableland east of Coen. Patches rain forest increasing to East. Hoop pine.

11.40 Photo creek at Coen Airport (Croll Creek).

11.41 Over Coen Airport.

11.45 Landed. 4 photos Coen drome.

12.35 Left Coen drome.

12.40 Over Irvine Creek. Open dry savanna forest, low trees from Coen airport, no scrub on creeks.

12.44 Blue Mountains (photo). Brushy rain forest and savanna forest. Long way from rain forest of main range.

12.46 Attack Creek. Some rain forest trees on banks.

12.49 Geikie River (perhaps Falloch Creek). Photo looking East. Narrow rain forest on banks.

12.59 Wenlock River. Brushy rain forest on hills (patches).

1.01 - 1.02 3 photos Mt. Carter ? Much rain forest; fan palms. Trees in flower.

1.05 Foot of Lloyd Bay. Photo from southwest, over scarp of Divide.

1.07 Photo as 1.05. Rain forest all along scarp and down eastern streams.

1.10 Photo down Claudie River , rain forest on creeks.

1.15 Arrived Iron Range. Photo Mt. Tozer from drome.

1.35 Left Iron Range.

1.37 Photo Portland Roads from near Iron Range.

1.40 Photo east to Portland Roads. Light rain forest on low tableland.

1.43 Mountains bare back from coast slope (fires ?).

1.44 Mouth of Pascoe River from southwest. Some rain forest on hills and streams.

1.45 Country much dryer north of Pascoe. Open savanna forest with lines of rain forest trees on creeks.

1.47 Photo NEE (north of Pascoe).

1.51 2 Eastern of 4 creeks entering Temple Bay (photo). Much dead tall mangrove foot of Temple Bay; patches as if logged; fallen dead trees.

1.56 Photo distant dunes above mouth of OliveRiver (?).

[illegible]

1.58 - 1.59 3 photos lower Olive River and sand dunes.

2.01 Beginning sand dunes.

2.06 Foot of Shelburne Bay looking east, (end of sand dunes).

End of Film 1

2.18 Much light colored (dry ?) rain forest on ridgy country back from coast.

2.23 2 photos (1 close-up) light rain forest southwest of False Orfordness.

2.27 Light rain forest of hills now much broken by savanna forest on lower hills and hollows.

2.30 Patches of heath (?) (same green as savanna forest).

2.34 Over main Jardine River. Clear water. Rain forest on hills. (Creeks going to Jardine since about 2.25).

2.36 Savanna forest and small areas thin pale rain forest,& creek running North.

2.38 Recross main Jardine River. Dry savanna forest, few small bits pale rain forest.

2.40 Jacky Jacky (right) and Escape River. Dry savanna forest and open flats. Very dry savanna forest above second crossing of Jardine.

2.42 2 photos Jacky Jacky Creek and Higgins Field.

2.43 Cross Jacky Jacky Creek.

2.45 Photos mouth Jacky Jacky Creek and head of drome. Jacky Jacky - red soil ridges, good savanna forest.

2. Several photos ending tip of Cape York and Islands. Good camp site at crossroads (between Higgins Field and Red Island Point).

2.55 Photo Horn Island from southwest or south. Mt. Augustus in background.

2.57 Over Thursday Island. Photo Thursday Island from south.

-o-

E.4c - 1.4s 3 photos lower Gulf Blvd and sand dunes.

E.5C Beginning sand dunes.

E.6c "a" of Baldcypre Dr looking east, end of sand dunes.

End of Film 1

E.1c Beach light colored (dry ?) rain forest on ridge - no sign back for coast.

E.1b 2 photos (1 close-up) light rain forest mainly of Pine Cordgrass.

E.1c/ Light rain forest of Pine and mixed species ; dense forest on lower hills and 1 ridge.

E.2c Meadow of beach ( ) (some green as earlier).

E.2a Dune water-ward side forest. Flat water. Main Street or Pine (Crooks going to Jordan place about E.2b).

E.2b Beach forest and dunes above high pale sand through, & creek mouth (Cut)

E.2c Beach main "Anclote River". Day earlier (Count) low small high sand main fore.

E.3c Along creek (right) and beach above ( ) low savanna lower and open flats. Very dry savanna forest above beach (changing of scenery.

E.3c 2 photos sandy beach trees and shore "hole".

E.3b Cross Sandy beach dunes.

E.3c Pelican mound, beach dunes (open and land of 4 one. Sandy beach - rain hill ridges, good savanna form.

E. Several photos looking big of Cape Sorf - on Lighthouse. Good copy also at conservation (between Tarpon Springs Pinellas and Port Richey Pasco).

E.4c Three Mile Island from mainland or small. Mt. Vernon to Sunset.

E.4f Over Tarpon Springs. Sponge Harbor Elev 2 from south.

Flight Horn Island to Iron Range, ANA Dragon
Rapide plane, Pilot Bonney, Feb. 13, 1948.

Sitting on port side of plane.

7.45 AM Left Thursday Island on course, having circled town after take-off from Horn Island.

7.56 Mainland 1 mile north of Red Island Point.

8.01 Higgins Field ½ mile to right.

8.02½ Over Jacky Jacky Ck.

8.07 Over road to east coast (2 wheel tracks in savanna forest).

8.10½ Over Jardine River - all savanna forest.

8.13½ Jardine again, or a branch.

8.15 Dense forest (rain forest?) begins.

8.17 Creek going NE in dense forest (rain forest?).

8.20 Dense forest persists only on ridge tops; elsewhere savanna forest and shrubby flats.

8.26 Dense forest (rain forest?) again, in irregular bodies; glint of water in all this forest.

8.35 Coast and mouth of creek ½ mile to left. About half-mile strip dunes (rain forest and blowouts) along coast.

8.35½ Going out over bay. Group small islands about 10 miles east.

8.39 Cross back over coast. Road along coast (mangroves, narrow strip, dunes; savanna forest). Time 8.39 or 8.38 - pencil note not very legible.

8.40 Wide-mouthed creek ½ mile to left.

8.42 Beginning great area dunes. Some rain forest on dunes; savanna forest elsewhere. Many patches bare white sand on flats as well as dunes.

8.48 Heavy rain; poor visibility. Big lagoons among dunes toward coast.

8.51 Over mouth Pascoe River.

8.55 Grassy capes; pandanus hollows. Red bluffs on capes (all capes like this since Pascoe.

<u>Note.</u> Pascoe of 8.51 must be Olive River.

8.59 Big creek right 3 miles enters sea (Glennie Ck.?).

Night from Island to Long Range, and Tongue
Depth plans, Point Pelney, Feb. 22, 1909.

Leaving original anchored place.

.45 AM Left Thursday Island 2 months, having stores and water left off
from Port Talbot.

7.00 Sighted 1 white corner of Cape Henry Point.

8.00 Sighted Pixell's white to right.

8.30 Over Jardine Bay Co.

9.00 Over road to east coast 2 miles towards Cooma Bay.

9.10 Over Jardine River - all grass forest.

9.15 Turning south, on a bend.

9.15 Open 1 mile (grass & reed) begins.

9.15 Open gully, 40 in open stock (rate 20 miles).

9.20 Pandanus reed patches only in gully, tops of gully abundant in open forest
and grass.

9.25 Dense forest, main forest, mostly in straight-trunked [illegible] of 40'
to all this forest.

9.30 [illegible] of steady [illegible] 1 hour 1 [illegible] fairly [illegible]
forest and no water [illegible].

9.35 Dense and over [illegible] gully [illegible] about 17 miles south.

9.5 Close to east coast. Good [illegible] (Unknown). Fairly [illegible]
[illegible] forest). Line 1.15 or 1.55 - [illegible] not very
[illegible].

9.50 Tea-coloured [illegible] to left.

9.50 [illegible] grass [illegible] Cooktown Forest [illegible]
[illegible] [illegible] water [illegible] [illegible].

9.50 Heavy [illegible] visibility [illegible] among [illegible] towards coast.

9.50 [illegible] Jardine River.

9.50 Heavy [illegible] bottom. Dad [illegible] [illegible]
[illegible] Jardine.

Lunch [illegible] 9.51 [illegible] to Olive River.

9.55 Big creek right & [illegible] [illegible] (9.57).

9.00 Mountainous country begins. Not much rain forest. Mountains mostly open grass.

9.05 Mountains - much bare pale jagged rock. Mostly savanna forest. Some thin rain forest.

9.06 Over Fair Cape (vegetation as 9.05).

9.08 Mouth Pascoe about 1 mile to right.

9.13 Photo dissected rain forest tableland north of Iron Range and east of Portland Roads.

9.18. Landed Iron Range.

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Archbold Cape York Expedition

L. J. Brass - Voyage on "Lochiel," Portland Roads to Cooktown. February 16-20, 1948.

Feb.16. Left Portland Roads 7.30 AM.

12.30. Cape Direction. Granite, with red to whitish sand drifted against it from southeast. Sand stabilized; cliffed to sea; covered dense pale green scrubby vegetation which straggles out on granite. Much bare rock on cape proper.

2.00 Off Lockhart Mission. Savanna forest on low coast hills & apparently (sky overcast) on northernmost segment of Macrossan Range.

Feb.17. 7.00 AM. Anchored under Burkitt Island. 99 miles from Portland Roads.

9.00 " Left Burkitt Id.

9.30 PM. Anchored Owens Channel, Flinders IS. - 36 miles from Burkitt Id.

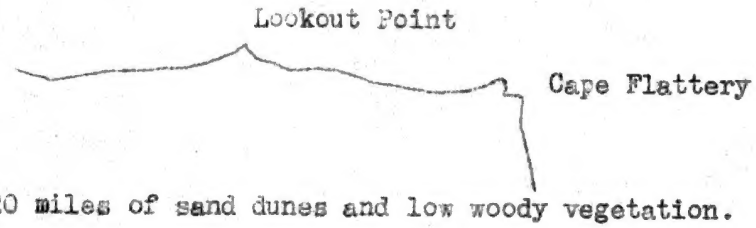
Feb.18. 6.15 AM. Left Flinders Is. anchorage.

Flinders Group - brownish granite. Low pale green stunted box? timber. Dry.

2.00 PM. Off Cape Melville. Hills of pale purple-grey granite boulders; sparse pale green low woody growth. Most sterile headland yet.

Feb.19. 6.00 AM. Off Horwick Id. Rough sea but less wind & weather clearing. Rough night.

4.15 PM. Anchored Decapolis Reef ¼ hour to fish. No luck. No meat for two days. Eating rice and mouldy bread.



Feb.20. 4.00 AM. Arrived Cooktown and anchored in harbor to await dawn.

Saturday, Jan. 31

On correspondence.

Dined with the Bates at Edgehill, some three miles out of town, under the foot of the mountains. The Bates have no children and Mrs. Bates accompanies her husband on some of his long trips. Last year they drove down the Mitchell River to its mouth on the Gulf. The Bates have a yard full of ornamental native and exotic plants, including some fine young picabeen palms and treeferns.

Have from Bates four seeds of Corypha alata from the Mitchell River, its only known habitat in Australia.

Sunday, Feb. 1

Most of morning spent at the home of Mr. and Mrs. W. Kirkwood. Kirkwood photographs orchids in color (kodachrome). Mrs. K. is a keen collector and grower of native orchids: has about 700 plants in a slat house and on trees in the garden. K. has some excellent kodachromes; is thinking of doing an illustrated article on North Queensland orchids for the National Geographic.

In afternoon drove with Mr. and Mrs. Dupain to Kuranda, and had dinner with them at the Kuranda Hotel. Kuranda is beautifully situated on the Barron River, about 1000 ft. above sea level, and only half an hour drive from Cairns on a fine new highway built during the war. Rich rain-forest. Climate much cooler than at Cairns. Would be a good place to work for a few days if we should be delayed in starting on Cape York.

Monday, Feb. 2

Left Cairns airport on an ANA Dragon Rapide biplane, Pilot Maurie Bonney, at 8:57 AM, stopped at Cooktown, Coen and Iron Range and arrived Horn Island airdrome about three o'clock. Good weather for air observation, but the plane was so stacked full of cargo that I could only see well from the side on which I sat--the starboard side. We carried only three passengers; 550 pounds of cargo.

Had a good view of Mt. Finegan from the seaward side. An imposing, somewhat conical peak standing out well above everything else in the mountainous country between the Bloomfield River and Cooktown. Entirely forested but for some rock faces on the southerly side at the summit. There seems to be a depression on the summit, opening to W or NW of some considerable size. Looks like a mountain well worth our attention.

Got a glimpse of Coen township, about 10 miles to the west of our course. In a jumble of low mountains and grassy valleys, well back from the rain-forested crest of the MacIlwraith Range. Does not look very attractive to me. Too far from the rain-forests. We should try to work on a tableland to the east of Coen, where hoop pines (Araucaria Cunninghamii) grow in abundance and in places of continuous rain-forest. This very extensive tableland is on top of the MacIlwraith or Main Dividing Range and appears to be triangular in shape. The maps I have give an altogether false impression of this range country.

Our landing place will be Red Island Point. An average of two boats a week visit RIP from Thursday Island. A big launch owned by Cadzow (butcher) and a 60 ft. landing craft owned by Wreford (carrying sawn lumber from Holland's mill).

Tom Holland is married to Sharret Cowling of Madiri Plantation, lower Fly River.

Am more than ready to leave T.I. but as there is no chance of getting on a plane until sometime next week, I will make a trip to the mainland on Cadzow's boat leaving Friday or Saturday. The long delayed wet season seems about to break and T.I. is extremely hot and muggy. The little town of about 300 whites and 600 resident natives is staging a slow recovery from neglect and wanton damage by the Australian forces which occupied it during the war, and is almost as stagnant as the overheated air. Conditions are incredibly primitive in at least my hotel, and to make matters worse, the town water supply has broken down and the only water available is from a small emergency supply which is siphoned out of storage tanks for a short time each day. This is the sixth day of water shortage. As Ethel the prprietress said, as I drew a fire pail of water by the kitchen door for my morning ablutions, "It's bloody awful". The bathhouse is out the back, in the hotel yard. A crude, dirty little shed with half a roof, a wooden wash stand and a jagged piece of a mirror; no sink or wash bowl and no light. You provide your own soap, and take a bath by ladling water out of a pail with the bottom part of a soap dish.

Ethel is quite a character. There was a party in the hotel last night and she was in it. Had one too many after the 39th. Fell and broke her head open on the concrete floor. When I went down early this morning, there was a pool of her still wet blood a foot across at the bottom of the stairs, and a little black pup was licking it, licking her blood from the cement.

The chief activities here are pearling, and trade with the Torres Strait islands. Pearling ceased with the outbreak of the war in the Pacific, and after the long rest the beds have had, shell is now plantiful. Before the war there were 70 boats and nearly all diving was done by Japs. Now there are only 30 boats and white men and islanders are doing the diving. Owing to inexperience of the crews and divers, output per boat is small, but a very high price of about £600 per ton for shell makes the industry pay extremely well. The boats are in now for the wet season lay-off. The shell is being sorted and packed in boxes for export.

Have decided to give old Joe McLaughlin a job as cook after all. He was on the booze when I arrived but has pulled out of that and is going over to RIP to camp until we are ready to take the field. Will try him out. If he fails us we shall perhaps be able to get an island cook. Jensen has offered to keep a lookout for one. Joe has advantages for us in that he is an experienced camp cook and knows everyone on the Peninsula. Against that we will have to pay him more than we can really afford on our slim budget. Do not yet know what his wages will be. Such things are fixed by awards and awards are in process of being reversed with the introduction of a 40-hour working week.

Iron Range will be a splendid area for us. Much rain-forest on the Claudie River, and on ridges of the coastal plain, as well as on the eastern face of the mountains. Doug Fisher, agent for ANA, invites me to stay with him at Portland Roads on my return trip and he will have his son drive me through the country.

The tip of the Peninsula also looks good. Our course took us several miles west of Higgins Field and right over Red Island Point ("RIP"). Extensive patches of rain-forest on low hills south and east of RIP, and continuous rain-forest on the same line of hills toward the NE.

Horn Island, where we landed on an old military strip, is separated from Thursday Island by a strait about a mile wide. A flattish big island covered with savanna-forest of Eucalyptus and other low trees. <u>For further notes on flight see small notebook</u>.

Although our plane landed on Horn Island about 3:00 PM, and actual travel time from there to Thursday Island was but thirty minutes, it was 4:30 before I got settled in the Torres Strait Hotel. The plane had to be fuelled before we climbed aboard a decrepit old Army truck to drive to the almost equally decrepit old military wharf. Upon arrival at T.I. we had to wait on the pier until someone found a truck to take cargo and ourselves to the Agent's office. George Assange, the agent, is a half Malay, half white, who also keeps a small store.

Through ANA of Cairns, I had an advance reservation at the Torres Strait, but I had first to awake the barman, who awoke the proprietoress, who had the colored maid make up a bed for me.

It was a few minutes before five before I got down to the B. P. establishment on the waterfront, to find the manager, Charlie Mills, about to close up and join the evening beer session. Went along with him to Kelleher's Federal Hotel next door, and met practically all the civil servants and business men of the town. Beer is scarce. Each of the four hotels puts on a nine-gallon keg at five o'clock five days a week. The beer disappears in a few minutes, leaving the really thirsty ones no choice but to carry on on hard liquor.

<u>Thursday, Feb. 5</u>

Have met about everyone in town, have spent one evening at the house of Tom Loney, the government official who functions as mayor while war damages are being repaired, and another evening in the house of Percy Jensen, Protector of Islanders. Arrangements for our work on the tip are as complete as they can be made in advance. Tom Holland came to T.I. today to have some teeth fixed and I have talked with him. He will do our transport with a 4x4 truck at a charge of £6 per day including fuel and driver. We will probably be able to hire a jeep from Tom's brother Stan. Our first base camp will be at Holland's sawmill, on the Somerset road about two miles NE of Lockerbie. The sawmill is in an open pocket in the best rain-forest on the Tip. Our next camp will most likely be on the east coast about a mile SE of Lake Bronto, three miles S. of Somerset, and six miles E. of Camp #1. Camp #2 will give us coastal sand dunes, freshwater lakes rising and falling with the tides, turkey bush, rain-forest and savanna-forest. Mutee Head, near the mouth of the Jardine River, about 18 miles SW of Camp #1, will probably be a good locality in which to spend any spare time we have.

Wages are high. Have arranged to employ two mainland abos at 2/5/- per week, and a Torres Strait islander at £20 a month. Will give these natives a month's trial, and if they work out well will sign them on for the rest of the trip.

Saturday, February 7 - Sunday, February 8

Trip to the mainland with Jim Cadzow, the butcher. Left T.I. at 1 AM and arrived Red Island Point about 5 o'clock. Cadzow takes his launch across about once a week to get beef slaughtered by Stan Holland and his partner "David" McDowall. Ours was a hot trip. Cadzow's launch is a cargo carrier, with no cabin or awning. The sun poured down from a cloudless sky and the little breeze there was was behind us, from the NW. Trying to pick places which had not been painted by seagulls, we sat on the rails and sweltered. There were four white passengers besides myself, and up forward, about ten abo men, women and kids (two of the latter white half castes) from Cowal Creek Mission. Dave Evans, one of our passengers, is an old Telegraph man who was mentioned by Hector Macquarrie in the book "We and the Baby". Dave married a native woman; is now retired from government service and living on the Tip. Ia being given injections at T.I. hospital for a vitamin deficiency condition.

Our route across was between Horn Island and Prince of Wales Island, to the east end of Entrance Island (three big islands, dry, hilly and with some rain-forest on their slopes), then across Endeavour Strait, between Low Woody and Barn Islands. Rain-forested hills conspicuous on the mainland, and they look higher than 200-300 ft. which is the height given for them on the map.

Red Island Point is an attractive place with a clean sandy beach and big shady green trees. It was the landing place for Higgins Field during the war. The wharf is falling into disrepair, and it and the space behind it are littered with scraps of war surplus equipment. The whole place could do with a clean-up, which it will not get now it is in civilian hands.

Stan Holland lives here with his wife, small daughter Kathleen (or Katherine), and baby girl. Tom Holland and wife and two children are at the sawmill in the rain-forest near Lockerbie. Others of the Holland clan Pearl (about 20) and Dick (about 16), who live with their parents at Lockerbie Homestead. Old Dick Holland ("Ginger Dick the Bastard") has been on the Tip 35 years. Was head stockman for Frank Jardine of the original pioneer family. An educated man, wearing rimless glasses and looking more like abanker on vacation than a cattle man and bush worker. I gather that Old Dick has not been a very consistently hard workers His sons are fine physical types and are ~~reputed~~ reputed to be enormous toilers.

Certainly there was plenty of movement when we arrived at RIP. First, Stan climbed into his jeep and drove two police constables and myself to Higgins Field. The ten mile drive was done in about twenty minutes, on a well made road built by U.S. Negro engineers. Road of red lateritic soil, leading through tall savanna forest of messmate and bloodwood , and skirting patches of rain-forest in the first five miles. Grass 2-3 ft. high in the savanna-forest; green and fresh. Trees 60-80 ft. tall and up to eighteen inches through.

Much bigger timber than I expected here. A Cycas common in one place; a fan palm (Livistona) plentiful throughout.

Higgins Field is a good asphalted airstrip, and the rather numerous buildings remaining there are in good repair and freshly painted green. Would make an excellent camp for us, but I doubt if the country around it would repay working for more than a few days (savanna-forest, with shrubby growths in hollows and mangroves nearby). In charge as caretakers, and himself taken care of by a hefty Torres Strait woman, is Ernie Longford. A slight, erect, gingery old man, with maimed and shrivelled body and sun blotched skin, clad in khaki shorts and sneakers. Ernie would be repulsive but for a straight, friendly look in his red-rimmed grey eyes.

Back at RIP Ginger Dick invited me to climb aboard his 4x4 truck and we drove toward Lockerbie until dusk. Drove about six miles on an unformed bush road leading through savanna-forest under the rain-forested hills. Crossed several small streams edged with rain-forest, and drove over several sandy flats with small-leaved Melaleuca, a heath, and pitcher plants (Nepenthes). When we turned at dusk, the road ran close to the rain-forest, so we stopped to examine it until darkness drove us back to the truck. A dryish type of rain-forest here, but apparently rather rich in species of plants. The big scrubs (scrub = rain-forest) on the hills, and farther north, promise well. An instruction trip, enlivened by Ginger Dick's stories of the bush and bush creatures.

The honey possum lives in the savanna-forest. Finding a native bees nest, it gnaws out the entrance, inserts its brush-tipped tail, then eats the honey adhering to the brush. The striped possum (perhaps Dactylonax or Dactylopsila?) is known from only one specimen caught at Cape York Telegraph Station and sent to Prof. Watson of Adelaide University. In one part of the rain-forest near Lockerbie luminous fungi (?) are so abundant that the forest is lit with a fairy glow in the wet season. "When my children were young, I used to take them out to see it", said Ginger Dick the Bastard.

We got back to RIP well after dark to find "trouble at the yard"; all was still and silent but for a scuffling of hooves and now and then a bellow or a string of curses. A rogue bullock had broken away from the mob and after much effort on the part of men, horses and dogs, had finally been brought in among some quiet "coacher" cattle. Stan and his helpers were now working in the yard (= corrall), separating the killers from the other cattle. We ate a hurried meal in Stan's house about nine o'clock. Various mishaps, and the reluctance of the blackboys, delayed the start of killing until eleven o'clock. Working by electric light, they were at it all night, barefooted in the blood of the killing floor, and clad only in shorts. Seven bullocks were slaughtered for 2900 pounds of dressed beef. We left at daylight with the beef stacked on the launch and hurried back to T.I. to get it into the freezer before the heat of the day.

The trip to the mainland convinced me that the Tip will be a profitable locality for our work. There is a wide variety of accessible habitats. We can be sure of cooperation from the Hollands in transport and showing us over the area. Wet weather should not seriously interfere with our work. The roads are better than I though we would find.

A remarkable thing about the Tip is the absence of leeches and scrub itch (a mite-like red bug). The Hollands assure me of this. Tree climbing kangaroos occur in the rain-forest of the Escape River but not on the Tip. Kangaroos are about, as are cassowaries. Cuscus, wallabies and a big rat that eats coconuts (and has a white-tipped tail) are present.

Monday, February 9

The wind has changed to a fitful northwester--a mere breath of a breeze. Clouds began to build up yesterday. There was a shower last night, and this morning a downpour. The air is cooler, the dust has gone, and so has the tension of the past week of unrelieved and unrelenting heat.

Tuesday, February 10

And still in T.I. Thought I might be able to get away yesterday, or today, on the "Lochiel", the cockroachy vessel I inspected in Cairns a week or so ago. The Lochiel left for Darnley and Murray Islands with cargo on Friday and was supposed to be back Sunday or Monday and leave right away for Cooktown. The skipper offered to drop me at Portland Roads, from where I can take plane on Friday. But this is T.I. I'm more or less resigned to waiting. Am even getting used to the "Blood House", as my hotel is called.

Last night I had dinner and spent the evening with the Cadzows. Very pleasant. Other guests were the T.I. doctor (Brown) and his wife, and Capt. Hamish Campbell, a Torres Strait Pilot. Interesting company. Cadzow, a well informed man with a taste for good books. Campbell, one of the seventeen members of the Torres Strait Pilot Association, was master of the B.P. ship "Macdhui" when the Japs sank her with bombs in Port Moresby Harbor. A big burly chap with a thick Scotch brogue and picturesque turn of tongue.

Brown was one of the band of 200 Australian paratroops (the "Sparrow Troops") who held out against the Japs for three years in the mountains of Timor. The detachment was landed to create a diversion from the New Guinea campaign. They took to the hills, made friends with the natives, lived on the land, and held out in guerilla warfare to the end of the war. At one time the Japs had 70,000 troops on the island. The Portuguese collaborated with the Japs against the Australians, as did some of the native chiefs, who were mostly Portuguese halfcastes. But the natives themselves remained loyal, although the Australians had no money after the first few days. Other natives were loyal to the Japs. It all depended on who contacted them first. The main stronghold of the paratroops was on a high mountain south of Dilli and about half way to the south coast. This mountain was 9066 ft. high and the Portuguese built a column on its top to bring the height to 10,000 feet. The natives at this high altitude (top of the peak?) grew English potatoes and had buffalo. They also grew paddy rice on elaborately terraced slopes. I did not know that the Timorese grew rice or terraced the ground.

Brown says their stronghold mountain would be easy to get to in peace time. It should be a good spot for biological exploration. Timor is a most important island for biogeographical studies, and an

island about which very little is known. A Dutchman (Eyma?) made the first important collection of plants there about 1938 or 1939. Brown is very keen to go back to Timor. He should make a good expedition man. A very small little chap, but I should judge 100% man. Knows radio well. Is well liked and has a good professional reputation in T.I.

At the doctor's house in the evening for cards (500). The name is Barnes, not Brown.

The "Cora", a John Burke vessel of about 150 tons, came in yesterday from Gulf Ports. Tried to get a passage on her to Portland Roads as she leaves for Cairns at daylight tomorrow, but partly through the reluctance of the Captain (Sid Niel) to put into P.R. on a special call, and partly because of uncertainty as to when the vessel could arrive there, I gave it up. The Cora has only one qualified navigator and therefore anchors at night. She could not get to P.R. before Friday perhaps, and I have a plane booking from here to Iron Range for that date. Capt. Niel is run down through overwork and is the gloomiest man I have met in a long time. Reports of a cyclone off the east coast add to his worries as he slouches despondently from bar to bar with a bunch of ship's papers under his arm.

Wednesday February 11

Morning spent at the Bank of Australasia, browsing through Novitates Zoologicae. The manager is a son of A. S. Meek, the famous collector who for many years combed the New Guinea subregion for birds and insects for Lord Rothchild's Tring Museum. Meek has apparently a full set of the Novitates up to Volume XL, published in 1937, when Rothchild died. Also has photo albums and newspaper clippings of his father's. A. S. Meek married a sister of the two Eichhorn brothers whom he trained as collectors. A. S. Meek died in Sydney some few years ago after living in retirement since 1908. One of the Eichhorns died in Cairns, the other was killed by New Guinea natives during World War II. Meek junior has no interest in Natural History and I am trying to persuade him to give his father's books and records to a museum, preferably the AMNH, which now has the Rothchild bird collections.

Meek and all other business men I have met in T.I. are most critical of Queensland Government policy in regard to the Torres Strait native. The natives have too much money, get too much tender consideration, and are badly out of hand. Islanders earn high wages as pearl divers. Some island communities have been assisted by Government in acquiring pearling vessels of their own. Some of these vessels, now native owned, were confiscated from white owners during the war and these former owners are unable to get them back. Meek says he knows one native diver who last year had an income of £1500 after taxes; others are in the £1000 a year bracket. Natives who formerly were segregated in native quarters, now live in former European houses through the town. They are getting grog, riding around in taxis and are most independent in their attitude toward white men. Mrs. Meek said that this morning she walked past some native children playing in the street, and one child called "white trash" to her. The child was reprimanded by another child of the group. Evidently there is racial feeling on both sides.

Some of the contemporary white men definitely are trash. Wasters who hang around, doing little in the way of work and lowering the prestige of whites in general. Social legislation, gone haywire, is responsible for some of this. Take the wharf laborers for example. There is one regular boat a month, and seventeen wharfies who will do nothing but work sh ps cargo. Under the law, these men get paid 12/- for every day they report for work. Every morning they gather in the shade of a shed at the end of the pier, sign the book an official brings along, then go home. All wharfies in Queensland come under this system. The money comes from a tax of 4½ pence a ton on cargo. The men are demanding a 2/- increase in no-work pay, now the 40-hour week is in force.

Thursday, February 12

The "Lochiel" returned to T.I. yesterday. Expects to leave for Cairns tomorrow. Have arranged with Capt. Smith to pick me up at Portland Roads Sunday and drop me at Cooktown about Tuesday. Witnessed a set-to between Smith and a colored crew man (Da Costa) following refusal of the latter to obey an order. Today the crew man was given fourteen days suspended sentence for assault.

Out on a boat trip with Charlie Mills, Fred Mills, and Roddy Bruce (the latter a resident of Murray Island). Landed on Friday Island where I collected several plants and picked up a wallaby skull. Wallabies said to have been introduced here from the mainland. Deer were let go on the island years ago. Said to have come from Java. Caught a fleeting glimpse of a group of several as they made off in thick cover. A loud snort from one as they started away. Island evidently overstocked with deer. Tracks everywhere, grass scarce; shrubs and bushes eaten. On this island coastal sanddunes with trees of rain-forest type in clumps and strips--soil almost bare of herbs, savanna-forest (eucalypts, tea-tree, grevillea) back of dunes on sour sandy flats, dry rain-forest on rocky hills.

Trolled with several lines, no fish. Anchored and fished for an hour or more at Buttertin, off Prince of Wales Id., one small snapper caught, by me.

Friday February 13.

From T.I. to Iron Range by ANA plane, and on to Portland Roads by lorry. Staying with Mr. and Mrs. Doug Fisher.

Had to report at the office of George Assange at 6.30 AM, which meant getting dressed and finally packed by the dim light of a borrowed flashlight. The T.I. power plant closes down at midnight and starts again around 7:00 AM. Water supply still out, after official messing about for two weeks.

Took off from Horn Id. drome 7.45, arrived Iron Range 9.18. Clouds and rain; visibility only fair. See small book for flight notes. Young Barry Fisher drove me to P.R. in a most neglected and almost broken down Chev. truck--the "Red Horror". Heavy rain soaked us before we got to Iron Range proper, seven miles from the airfield. Sheltered there with Mr. and Mrs. Bert Connell until rain stopped; tea and talk with this gold miner and his wife, living in the sole remaining building of a former AAF radio station. Connell getting coarse gold in small vugs in hungry-looking iron-stained white quartz.

Between Connells and P. R. we stopped to shoot a red wallaby for meat for Fisher's dogs. Arrived Fisher's place about 1.00 PM. Former AAF radar camp, under west side of Aylen Hills and about half a mile from P. R. Wharf. Fishers have three fine children--Barry aged 17, Judy aged 6 and Beverley aged 5. Living fairly comfortably, if somewhat roughly. Have kerosene-burning refrigerator and some half dozen goats for milk. Have fresh vegetables for about a week after arrival of the monthly boat. Get fresh beef by air from Cooktown at cost of 6s a pound for freight. Fish plentiful.

Country about Iron Range airstrip mainly eucalyptus savanna forest; good ra n-forest on adjacent Claudie River, and on hills a mile or two distant. Between airstrip and Connell's mainly tall rain-forest, edging streams and on the Iron Range line of hills; some savanna-forest, and a few treeless grassy areas of small size. Mainly good tall rain-forest for about three miles east along road from Connell's, then about two miles of very interesting shrub and small tree vegetation on top of a high ridge from which one gets a view of the sea to the east. Rest of distance mainly savanna-forest although strips of rain-forest follow streams and apparently big rain-forests cover much of the higher hill country at no great distance back from the road to the west. All ridgy terrain. Road surface generally good, but a number of the smaller bridges have been burned by bush fires, and some of the bridges over bigger streams badly in need of repairs.

Country at Portland Roads mostly box and bloodwood open savanna-forest (woodland) with crooked trees 30-50 feet high. Small patches rain-forest in heads of gullies. Coast in Weymouth Bay mostly mangrove fringed.

Went fishing with the Fishers on P. R. Wharf in afternoon. Shot sardines for bait. Caught about a dozen trevally, snapper and some gaudy tropical reef species strange to me.

Saturday, February 14

Very heavy rains; 7½ inches last night and over an inch through the day. Want to see more of the country, but the road, with its burnt out bridges would be impossible, according to Fisher, even if one did feel like travelling in the rain in a cabless truck. The two front wheels are off Fisher's other truck.

In conversation with Fisher I find he knows very little about this country. Have got more information from Mrs. F., whose first husband ( ) was a miner at Iron Range, and who herself has prospected for gold. Am constantly told that Jack Gordon is the man for me to talk to, but Gordon is out on a prospecting trip and is not expected back for six weeks.

From what I have seen, from the air and on the ground, I consider two months not too long to spend in the general area: one week at Portland Roads; two weeks at RAAF camp at Iron Range; two to three weeks at a camp on the upper Claudie, from where we can reach Mt. Tozer (1784 ft.); and the rest of the time at a camp from which we could work the big rain-forests about Connell's and the shrubby ridges to the east of there. Fisher has a 70x20 foot army

hut we could use at P.R.; he offers us the use of the RAAF huts at Iron Range Field. (Fisher owns all the old army camps in this general area; and is dismantling them and selling the materials).

Sunday, February 15

Rain again last night; fairly fine morning followed by more rain; about 1½ inches in all.

Climbed to the old radar post on the highest of the Aylen Hills (390 ft.) and photographed the country. Fine views of Cape Weymouth, Cape Griffith, Weymouth Bay and the mountains inland.

Learning more of the country and the people in it. About twenty whites all told in the P.R.-I.R. area, mining gold and tin or out prospecting. Jack Gordon is the super-bushman. With a dog or two, a 22 rifle, fly and what stores he can carry, roams all over the area on foot. Made a fortune out of Iron Range gold years ago; now has about £10,000 in the bank, but keeps on trying to find a real bonanza. Dolf Perkins ranks next to Gordon for knowledge of the area about Iron Range.

Monday, February 16

Went to sleep last night with rain beating on the roof of the old AAF hut ⊥ occupied, and water running down through rust holes to the floor around my army bed. About 12:30 Fisher woke me. Dressing and going down to the house, I found the Lochiel crew sitting around a bottle of Fisher's O.P. rum. They got to P.R. about dark. The "Wandana", north bound, arrived soon after, and while cargo was being unloaded, the steward opened the bar. Fishers both annoyed about getting no notice of the Wandana's arrival. They missed the beer. More than that they missed contact with the outside world which comes but once a month with the arrival of this ship. The captain might have spared a pound of steam for a whistle.

The Wandana brought a party of ten Main Roads men in charge of E. R. Pinwell; also two prospectors who want to push through to Wenlock with a small, heavily-loaded utility (= pick-up) truck. Noticed a full-size typewriter amongst the belongings of the prospectors. The men looked scarcely like the general run of gold prospector. They will have fun in getting through to Wenlock. We have had 14-15 inches rain at P.R. since Friday and the Pascoe will be high for a long time if rains continue.

Left P.R. on the Lochiel 7.30 AM. Bucked a strong southeaster all day and the boat being out of meat, we trolled lines for fish. The only catch was a bonita of the red-fleshed kind, which was thrown away as not fit to eat.

Tuesday, February 17

Kept going all night. Wind increasing. Sea very rough even here inside the Great Barrier Reef. At 7:00 AM dropped anchor under lee of Burkitt Island, 99 miles from P. R. We anchored to fish with "long shrimps"; i. e., gelignite. The d nghy was put overboard, then the crew decided the skipper had anchored too far out (as he had). The idea of getting fish was abandoned, and we were under way again by nine o'clock.

Weather worsening. At 9:30 PM anchored in Owens Channel in Flinders Group of islands, for a gain of 36 miles for 12 hours of running.

Wednesday, February 18

Up anchor at 6:15. We stopped at Flinders in hungry anticipation, to do some line fishing, hunt for turtle's eggs, and try to harpoon a dugong. The crew boys got out their "WOB" (Torres Strait harpoon), I put out a fishline, and that was that. When we anchored we heard the whistling noise of dugong as they came up for air on feeding grounds nearby. Our mighty food getters decided to get busy at daylight. When day dawned all thought lay in getting away, so on we went in the teeth of the south-easter, as queer a crew as ever sailed this fabled sea.

Smith, the skipper and owner, is an ex-officer of the Australian Navy, a good navigator but a poor seaman and ship's master; talks loud and long, and loses his head when anything goes wrong. "Panic," said Bally the mate, "is doing f---- all at the double. That's Smithy."

I agreed in that, but not to Bally Connolly, chief trouble maker on the ship. Called mate, but all he does is cook. A landsman who recently had an interest in a T.I. pearling boat, and now wants Smith to go pearling with the Lochiel. For 12 years he did the Tivoli Circuit with performing ponies and dogs. Walks like a horseman, and has red-rimmed trachoma eyes. As crude and low-down an individual as I have ever met. Have never come across a man I have judged so foully base and unprincipled. Banjo Patterson drew a character like his in the "Bastard from the Bush".

Almost as mean, I should think, but in a nicer way, is "Doc" Doherty, the engineer, and Bally's former pearling partner. Drank himself out of a good mechanical engineering business in Sydney.

Standing watch for watch with the skipper, but not on the payroll and with no business interest in the boat, is a smart young German known as "Gun". How this man happens to be loose, no one seems to know or care. Holds a German first mate's ticket. Fought with the Nazi armies in Poland, France and North Africa, and was captured by the British at Tobruk. Sent to Australia as a POW he was used as an interpreter; escaped, and according to his story, served on American transport vessels until the end of the war. Since then, he has been master of a Burns Philp steamer trading in the Solomons and New Hebrides. Is on the Lochiel for the ride and when the trip is over will go to Sydney to take delivery of three small vessels and take them to Singapore. Very interesting fellow; smart seaman, and very military in a gold braided cap.

With these men I occupy the small wheelhouse--cabin aft. Forward in the fo'csle, with the three native crewmen, is a feckless young white of beachcomber type, called Don. Supposed to be working his passage from Cairns and back to Cairns, I believe. He does no work and eats and sleeps with the blacks.

All this diverse collection of humanity on a little craft 52 ft. long. They bicker and squabble, sleep, and do what eating and smoking they can. We have not had a proper meal since Monday, when the canned meat ran out. For two days we have had mainly boiled rice and bread. The last can of pears was emptied over the rice for breakfast this morning. For lunch, Bally curried a can of mixed peas and carrots to go with the rice. For supper we had rice and golden syrup. All the smoking materials left are a few of my precious cigarettes, which I share with the others, and a can of tobacco which Bally is accused of hiding somewhere and retiring into the W.C. to smoke.

It's a hungry ship, even for the cockroaches. There is nothing for them to eat in our cargo of empty gasoline drums. At night, when only the binnacle light burns in the cabin, they crawl over our bunks. I have to keep my right foot wrapped in the sheet. That heel is skinned from my climb up Aylen Hill, and the roaches nibble at the sore spot as I sleep.

Thursday, February 19

At noon, when I would have been in Cooktown had I stayed with the Fishers and taken plane from Iron Range, we still had fifteen hours run to do at the skipper's most optomistic estimate. But for bad weather, we should have reached Cooktown Wednesday night. Today, though visibility was poor, I had views of the very extensive areas of sand dunes between Point Lookout and Cape Flattery.

Friday, February 20

Anchored in Cooktown harbor at 4:30 and drew into the wharf soon after daylight. A pretty spot, with high hills surrounding a flat basin at the mouth of the Endeavour River. Green and fresh with the rains, and the early light softening the sharp outlines of the hills. Captain Cook careened his ship here in 1770, and Banks and Solander collected plants which have not been seen since that time.

Put up at J. P. Hickey's Commercial Hotel, best in town, tariff 12/- a day. As a special treat, curry and rice was served for breakfast. The sale of rice is controlled and it is supposed to be eaten only by natives.

Among letters waiting for me was one from Dupain advising that our cargo from the U. S. has not yet left Brisbane, but is supposed to leave today or tomorrow by the SS"Time". All transportation disorganized by a rail strike now in its third week. Our cargo should have arrived in Cairns over a week ago.

Had phone talks with Dupain in Cairns and Thompson in Coen. Wired Geoff to fly to Cairns if strike continues. Geoff and Van due to arrive in Sydney by "Marine Phoenix" today.

Called on Landy (Shire Clerk), S. G. Brown (manager Bank N.S.W.) and Harry Worrall, garage man and live wire of this sleepy old town. Arranged with one Bluey Hales to drive me south to Shipton's Flat tomorrow.

Spent the evening with Dr. H. L. Kestevan, fishing from a wharf, and at his quarters at the Hospital. Kestevan, a comparative anatomist and embryologist of distinguished record, as well as a physician.

Was Director-General, Medical Service, Civil Construction Corps (C.C.C.) during the war. His job as M.O. here, taken up last year, will give him opportunity to study the embryology of the crocodile.

Saturday, February 21

Talk of the town this morning was a fight on the Lochiel between Smith and Bally. With thought no doubt for his own safety, with violence about, crewman Da Silva rushed up town for police during the night. Learning from Da Silva that no property had been damaged, and no one killed, the sergeant decided to have no part of the Lochiel and fifteen crew.

Left on the Shipton's Flat trip at 9:15 and got back in town about eight at night. Distance there and back 60 miles. Bluey has a good 2-ton Ford truck of Lend-Lease origin. Shared the hire of the truck with J. D. Dwyer, a young ex-policeman who, with a partner, has recently bought Kalpowar Station on the lower Normanby, and was going to Helenvale, 20 miles south of town. Dwyer a collector of birds eggs; has a classified collection of about 300 Australian species. He went on to Shipton's Flat with me. Others of the party were Hickey of my hotel, and Mick Concannon, a wharfie on holiday from Cairns.

Road to Shipton's Flat passes over sound country on which there should be no fear of bogging in the wet season if care is taken to keep to the old hard road on certain tea-tree flats between Cooktown and Helenvale. Road badly washed out in places. Low level crossings on several big feeders of the Annan River would delay traffic for hours to perhaps a day or two after heavy rains. The Annan is crossed by a good bridge four miles from Cooktown. Wallaby Creek (east branch of the Annan) is crossed by a good bridge at "The Forks" about two miles past Helenvale, but on this section the road is down in the river flood channels and would be made impassable by a rise of only a few feet in the Wallaby or the main Annan. After crossing Wallaby the road begins to climb, following a spur ridge. About two miles from Shipton's Flat, on high ridges of red soil wet with rain, we had to put chains on the wheels. The road would carry heavy traffic thru the wet season, but traffic would be held up at times by flood rains. That is as far as the lower edge of Shipton's Flat pocket. To get to the sawmill and on toward Mt. Finnegan, means crossing Parrot Creek (a big rocky stream) or a deep feeder gully. The bridge over the gully on the direct route has been washed out. Of two bridges over the Parrot, ~~thexgu~~ formerly used by timber hauling trucks, I saw only one, and that would need extensive repairs to make it crossable by a lorry. The sawmill has not worked for three years.

A caretaker, Jack Roberts, who spends most of his time working a tin show, lives with his cross-eyed wife in a cottage about half a mile from the mill. Roberts, a man of low intelligence. Has lived most of his life in this area but could give me only confused accounts of it, and he has never been far up the slopes of Finnegan. The mill would make a very comfortable base for us, but is situated about a mile from the base of the mountain and about three miles from the summit.

The mill is at about 700 ft. altitude, fide Roberts, while the top of the peak is 3740 ft. Roberts says we can get a good site for a tent camp at a place called Tabletop at the head of Shipton's Flat, a mile or more closer the mountain, and about 200 feet higher than the mill. The Tabletop camp would be on the edge of the great continuous rain-forest from which the mill cut timber, mainly kauri pine. Worrall, who hauled timber for the mill, tells me that old timber trails are plentiful in the big scrub, and that it was from somewhere about Tabletop that the Army survey party, stationed at the mill towards the end of the war, often climbed the mountain. Army surveyors said to have reached the summit in about three hours' climb, and to have camped on top while waiting for clear weather for observations.

Finnegan (called Mt. Finlayson locally) is a fine mountain, black with forest and towering high above the rugged mountain country in which it stands. It will not be an easy peak to work, but it should be well worth while. At Shipton's Flat there are fair sized patches and strips of rain forest on the ridges and along streams, in a country mainly savanna forest of a broad-leaved white gum (E. alba or platyphylla), a blue gum, Moreton Bay ash and bloodwood. Living in the area, besides the Roberts, are Lee, Robert's tin mining partner, and a few walkabout blacks.

Helenvale, on the east bank of the Annan, would be a good spot from which to work savanna-forests of the lower country and river-fringing rain-forest. Nothing here but a picturesque old bush pub of round timbers and corrugated iron, shaded by great mango trees. This is Mrs. K. Watkin's "Lion's Den Hotel". Crude, but spotlessly clean and neat, Kate Watson's pub is a center from which the Watson boys pack and haul supplies to the tin scratchers in the nearby mountains. When the miners are down, and drinking, the proprietress goes to bed and leaves them to carry on in the bar, and they always pay up. Her only helper is a black gin. When we arrived Mrs. W. was flustered about not being able to find her shoes, but soon discovering them on a kitchen shelf, she set about getting us a very ample morning tea, served on a great long table flanked by wooden forms. She had an excellent lunch waiting for us when we returned from Shipton's Flat at 4:30 in the afternoon.

The Watson boys will be the best outfit to do our transport. They were away at their cattle run, Butcher's Hill.

About four miles north of Helenvale the road passes through a gap in a remarkable range of jumbled granite? rock called Black Mountain, rising 1000 feet or thereabouts above the surrounding country, bare of soil, and carrying only a few patches of low brushy tree growth. A wierd place, still held in fear by the blacks.

In a small area about the homestead of Green Hills cattle station about six miles south of the Annan bridge, we saw literally hundreds of wallabies as we returned towards Cooktown about sundown. Some rusty brown, some rather greyish. Perhaps two species. Some almost as big as a red kangaroo. Bluey says they are here all through the year.

Sunday, February 22

A rainy day spent in gathering information from various sources. Worral the most useful source. Most of the active members of the community have not been in the district very long and cannot give much information useful to us. The old timers are mostly very old, and inclined to romance. Population of the town now about 300. In the good old days of the Palmermining boom the town boasted 36 pubs, packed in about quarter of a mile of main street; now there are but three in what is left of the town.

A Lutheran missionary, Mr. Schwarz, now over 80 years old, gave me very useful information on the extensive sand dune area between Cape Bedford and Lookout Point. Coming from Germany at the age of 19, he spent over 60 years as a missionary to the blacks at Cape Bedford Mission. A panicky government interned the old man in World War II, and shifted all his blacks to central Queensland, where they died like flies in the colder climate. Swartz recommends the lower McIvor river as a suitable place for a camp in the sand dunes. No road. Would have to go there by boat.

Sunday, February 22 (continued)

Noticed much scratching and scrambling going on in the ceiling of the Schwartz living room, and was told the noise was made by a pair of possums that live there. Possums--they are said to be grey--are a nuisance to householders in Cooktown. No doubt they find the space under a house roof more comfortable than a hollow tree.

Met a young American named Craig, from Rifle, Colorado, now tin mining on the Big Tableland, six miles by pack trail SE of Helenvale and about 2000 feet above sea level. Tableland flattish and covered with heavy rain-forest. Tin got by sluicing; water pumped by Diesel engine. Le Roy, Craig's partner, collects orchids for sale to Cairns fanciers. Transport to the Tableland is all by pack horse. Mining machinery was taken up on sleds.

Craig told of finding a small rat-sized marsupial in the rain-forest of the Big Tableland one night. Dropped to the ground from a tree, with three young ones clinging to her back. Had big dark eyes placed close together on front of head, and a prehensile (wholly?) hairless tail.

Monday, February 23

Was fortunate in making my trip to Shipton's Flat on Saturday. It has been raining practically all the time since then and the creeks are deep over the road. Rain coming from the SE, and word of a cyclone over the Gulf of Carpentaria.

Flew from Cooktown to Cairns, again with Pilot Bonney in a Dragon Rapide. Bad weather delayed the plane six hours in Cairns, on her start for Cooktown, and it was one o'clock instead of seven when we took off from Cooktown. Mountains cloud-covered but I got glimpses of Mt. Finegan from the seaward side and made photos of it. Muddy brown water from flooded streams sharply defined from the clear pale blue water of the sea within the Barrier Reef. Flew over a big British submarine which stranded on a reef in daylight yesterday, and was making for Cairns after sliding off with the tide.

Was met at airport by Bates and Stevens of Dept. of Agriculture, who drove me to the sugar-growing area of the Barron River and Freshwater Creek to see a new cover crop (cross between giant cowpea and Poona Rea) which is doing very well under conditions too wet for any other cover crop that has been tried to date.

Learn from Dupain that the "Time", with our cargo, is still in Brisbane. She was due to leave last Thursday. Was delayed through shortage of crew then, when she had a full complement, a fireman fell overboard and was drowned. A hoodoo ship. Left N.S.W. for Cairns last November and is still on the way. Had a fire. An old, old ship on which conditions are so bad that there is perennial trouble with crew.

A stack of letters waiting for me at the hotel, including seven from Marie. George writes that he has had to scrap all plans owing to the strike, and is working out of Townsville.

Tuesday, February 24

Strike still on and the Time still in Brisbane. John Burke's Cairns agents, Samuel Allen & Co. inform me that the "Wandana" of the Thursday Id. run, which arrived here southward bound yesterday, has only enough coal to take her to Townsville, where she will be laid up until the end of the strike. The Alagna, now going south, has enough coal to take her to Gladstone, and if she can go on to Brisbane will replace the Wandana for the March voyage. At any rate we will not be able to get a John Burke steamer for T.I. until later in March than the 11th, when we were supposed to leave. The delay in John Burke service is fortunate for us in a way, for there is little hope now of the Time arriving in Cairns before the 11th.

Dinner with the Bates at Edgehill.

The Time left Brisbane today.

Wednesday, February 25

Revising stores orders, etc.

Geoff and Van arrived from Brisbane by plane about 10.30 PM with seven pieces of baggage. Geoff had a carton of Chesterfields for me and 1½ pounds of tobacco. There is a tobacco famine in Cairns, owing to the strike. Had only a dozen cigarettes left, and nearly made myself sick on cigars today.

Thursday, February 26

Introduced the new arrivals around town. Looked over B.P.'s grocery stocks and placed our orders for 5 weeks' supplies for our camps on the Tip. Fresh produce such as potatoes and onions will not be available until the strike is over. We can get most other items we need, although some brands look inferior to pre-war quality, canned beef especially so.

Gave a talk on Nyasaland at a special meeting of the Field Naturalist's Club this evening.

George arrived on the 10.30 plane from Townsville with seven pieces of baggage. From now on he will be attached to our party.

The "Time", with our cargo on board, left Brisbane last night, carrying relief supplies of food for Mackay. Expected to arrive here on March 9th.

Friday, February 27

On correspondence. Called on Mr. Lightbody, i/c Civil Aviation at Cairns and in charge of all airdromes north of here. He will have the Iron Range groundsman inspect the water pipe line leading to the old RAAF camp, and if the line will carry water he will have the groundsman pump for us while we are camped there. Spoke to Gallop on this matter of a water supply. If the pipe line is useless he will have his Main Roads party carry water to us by truck - 200 gals. per day. Mighty nice of both men to offer this help.

Gallop has a party making a timber access road between Maalan and Sutte Ck., on the Atherton Tableland. Offers us transport to the camp, and shelter there, if we have time for field work before the arrival of our cargo.

George, Van and I to the annual meeting of the Cairns Orchid Society. A few nice native and exotic spp. on display. Gave a short talk on New Guinea orchids.

Saturday, February 28 - Sunday, February 29

Left Cairns 7.15 AM (George, Van and I) on a trip to the Atherton Tableland, arranged by S. E. Stephens, President of the Naturalists Club. Object, an attempt to collect fruiting material of Austrobaileya scandens in the Boonjie area, where Kajewski discovered the plant years ago. Party: Ern Stephens and his brother Gordon, Tom Webb, and George Brooks. Transport: Brooks' can and a 1-ton truck. Traveled the new military highway up the range to Kuranda, where we had breakfast. On through Mareeba, Tolga and Yungaburra to the dairying area known as Boonjie. Parked the vehicles on cleared edge of the rain-forest and within an hour I found Austrobaileya, a rather insignificant climber within the rain-forest. It was sterile and I could not be very sure of it at first. Spent rest of day on the search - at Old Boonjie, and down the metalled road leading to the Sawmill and Topaz - and finally decided that the plant I had must be Austrobaileya.

Stayed the night at the Lake Eacham Hotel in Yungaburra. George and Van set 35 traps in the rain-forest (actually a National Park) between Yungaburra and Lake Eacham and got nothing. Shooting along the road at night, they got a paddymelon wallaby and female and male Pseudocheirus Archeri. Much interest on part of guests as they skinned their beasts in the fern garden of the hotel.

Split the party on Sunday; the Stephens and I going back to the Boonjie area, the others driving about the tableland collecting insects. Brooks collects beetles. Van and George also collected insects.

Near Boonjie we stopped to examine a remnant patch of good rain-forest on Lammond's Hill, 2950 ft. and the highest spot on the Tableland. There found Austrobaileya fairly common in the rain-forest and along the edges. Searched all morning for fruiting specimens but could find none, and no flowers or flower buds. Took wood specimens and preserved them in Prof. Bailey's "F.A.A." solution. Also collected sterile herbarium material. Now we know where the plant grows, there is a good chance of getting fruiting material through Stephens at a later date. Stephens has a fairly good knowledge of the rain-forest flora and a good eye for plants.

Returned to Cairns via Mareeba and Kuranda, arriving about 9 PM. A pleasant trip for which we have some good material. Van shows himself very keen and observant and a good preparator, though somewhat prone to disregard the passing of time. George and I agree that he will work out well.

Monday, March 1

More woe. The government set the strikers a 10:00 AM deadline on which to get back to work today. Nothing happened, and today the seamen and wharf lumpers all along the Queensland coast have gone on

strike in sympathy with the railway men. The "Time" is tied up at Mackay, with our cargo in the bottom of her holds.

George and Van have with them enough gear and supplies to do limited mammal collecting, and we are scouring the town for more. Geoff found some rat traps. Our friends are rallying around with precious shot gun shells - 75 from Gallop and a like number from George Brooks. The Naturalist's Club have placed a big room at our disposal for working space and storage of specimens.

This morning Stephens drove George out to see a fruit-bat camp three miles out of town. Plenty of bats there which can be collected at any time.

This afternoon plans were finalized for George and Van to do some collecting in the Cairns hinterland. Van will go to a Main Roads construction camp in virgin rain-forest about 12 miles south of Millaa Millaa. A timber access road, called the Maalan-Suttee Creek Road, is being put into that remote country. The camp is at about 2500 ft. on top of the Range, with the South Johnstone River close to the east and feeders of the Tully draining the opposite side of the range. George will first go to Chillagoe to collect bats in the limestone caves, then join Van on the Maalan-Suttee Creek Road. Transport is being provided by Gallop, on behalf of the Main Roads Commission. Gallop will furnish a car and his own driver, and an assistant engineer (Abiss) will go along on an inspection tour. The party is to leave Cairns early Wednesday morning, drop Van at a road junction near Herberton, where he will be met by the man in charge of the Maalan-Suttee construction, and go on the same day to Chillagoe. George will chase bats there for one or two days, then be driven back to join Van. Gallop is lending Van a double-barrel gun, and is providing blankets, mosquito nets and eating utensils. Van never ceases to marvel at the kindness of these northern people, and their eagerness to help--nor do I.

Tuesday, March 2

A check on the strike situation indicates that things are likely to get worse before they get better. The one ray of hope for the early delivery of our cargo is the fact that the Time has a big cargo of flour and supplies are very short here in the north. Townsville will be without bread tomorrow. The Cairns supply of flour will be exhausted by the weekend, and some of the inland towns are already out of it. The beer supply in Cairns has been reduced 60% as of today. That will be a staggering blow for the idle workers. It is thought that when they run short of beer and tobacco they will be willing to go back to work. Food for their wives and babies is not a matter of such great concern.

Called on Mr. Crothers (or Carruthers), local Forestry officer, to discuss the country south of Cooktown. A nice old chap, who was Forest Guard at Mt. Molloy when I collected there in 1932, but no deep mine of information. Could not tell me anything new on Mt. Finnegan.

All of us to dinner with the Bates at Edgehill.

Wednesday, March 3

Since my return to Cairns the weather has been hot and muggy with only occasional showers or heavier rains from thunderstorms. Yesterday the barometer dropped one tenth of an inch and rain set in before nightfall. Real wet today, but the barometer is rising.

Abiss and the driver turned up early this morning in an army weapon carrier with a tarp rigged over the top for shelter, and George and Van left with them in pouring rain at 7.30. The rains have extended inland and travel is likely to be slow on the unpaved roads beyond Herberton.

With Bates to Merinda, 11 miles south, to visit the sugar experiment station of the Department of Agriculture. Bates is to take over the directorship in the near future. J. H. Buzacott, formerly entomologist at the station, now in charge. Staff consists of W. Humphrey, experimentalist; G. Wilson, entomologist; F. Lindsay, Farm assistant; R. Abbott, field officer. Area of 37 acres under experimental plantings of cane, cover crops, etc. All plant breeding of sugarcane in Queensland is done here. A good collection of breeding stock including many from the U. S. and New Guinea (some of latter collected by Brandeis, of USDA). Workers here speak highly of cooperation from Washington; the reverse from their fellow workers in the Dutch East Indies. The Dutch try to monopolize anything new they produce.

Queensland produces about 600,000 tons of cane sugar per year. Production is under strict control. Each farmer is allowed to plant so much acreage per year and he must hold one fourth of his sugar producing land in fallow. The rotation is one crop of plant cane, two crops ratoon, one year fallow. Most farmers in this area have 60 to 80 acres under planting permit; 40 acres is considered the minimum profitable area. Average production of cane per acre for Queensland is 17 tons an acre; average for Cairns area 22 tons; present price .

On the way back to town we stopped to look for bats in a number of abandoned tunnels in which ammunition was stored during the war. This was at Red Hill, 4 miles out. Found a line of bat droppings in the middle of the floor of all the tunnels, but not a single bat. Do bats migrate?

Buzacott has offered me the facilities of his laboratory for drying collections.

Thursday, March 4

Unions in the southern states are threatening a boycott on transport to Queensland and the strikers show no sign of going back to work. Flood rains are holding up road transport of supplies to areas that are short of food.

At last I have found a man who has climbed Mt. Finnegan. This is Mr. Alf Hansen, a versatile man of high reputation in this north country, who built the sawmill at Shipton's Flat and managed operations there for six years. This was back in the thirties. Hansen

and three others reached the top of Finnegan in about three hours from the sawmill. Their route was roundabout but not difficult. An area of about 500 acres of ridgy terrain and deep ravines on top, covered with what he describes as "turkey bush", with rain-forest trees in the ravines. The turkey bush further described as very mossy, about 5-6 ft. high, and so densely packed that one can walk on top of it. Impossible to force ones way through this stiff scrub, and the wood of the shrubby trees is so hard that cutting a track through it would be very hard work. Wood as hard as that of the renowned "ghittoe" of the Atherton Tablelands. There are ferny openings in the scrub. No water seen. The party carried water and therefore did not look for it during their short stay on the mountain-top. The mountain is usually enveloped in cloud in the SE season.

Hanson recommends that we camp at Francis Bros. old tin workings, in open forest on the south bank of Parrot Cr. about one mile east of Shipton's Flat sawmill (if the road is still trafficable). The approach to Finnegan follows easy slopes up the south side of Parrot Creek; follow creek up to divide, crossing a few spurs, but keep away from the steep northern slopes of the mountain. Follow the crest of the divide approximately south to the summit of Finnegan. Near the top of the climb are some big rocks from which a good view of the mountain can be had.

Hanson told of two large rats, of very dark blackish brown, and body length of about 12 inches, seen in the stiff scrub on top of Finnegan. The rats were on mossy ground, and very tame. As Hansen and party rested, the rats wached them from their mossy cover, "waving their whiskers."

Harry Sykes, a good old abo who worked for Hansen, recommended as a guide for the Shipton's Flat area.

From Mr. W. Harvey, manager of Bunning Bros. (trading as James Johnston), we have permission to camp at the Shipton's Flat sawmill. The mill will probably be moved to Cooktown after the wet season, but it unlikely that the ranch buildings will be removed. The mill was closed three years ago because of difficulty in getting men to work in such a remote place. At one time, said Harvey, the company could get all the labor it wanted. The men worked well, got drunk once a fortnight, and were happy. Now they want to live in the towns, and what is more, they can get plenty of work there.

Conversation with men who know the rainforests, and know our interests, usually gets around to the half-mythical marsupial tiger. Sitting among the palms on Hansen's porch last night, we were told of a party of about a dozen men who some years ago went out from Cooktown to investigate a report on a tiger having appeared at the Phoenician Tin Mines, near Mt. Amos, about eight miles north of Mt. Finnegan. After hunting for several days a striped beast, with body about two feet long, is said to have been shot. Hansen does not vouch for the story. He doubts the existence of the marsupial tiger.

Friday, March 5

Most important business of the day was a call at the Commonwealth Health Laboratories, two miles out of town, to go further into the

matter of antivenene for taking to Cape York. I opened the inquiry with Dr. Hanbrit, M.O.i/c, over a week ago. While careful not to advise against it, Hanbrit is skeptical about the whole thing. We have two deadly snakes to consider - the death adder and the taipan or giant brown. The death adder is all over Australia; the taipan is a northeastern snake extending south well beyond Cairns, but it is only very rarely that humans get bitten by these or any other kind of snake. Death adder bites are about 50% fatal. Not much is known about the taipan and its venom has never been analyzed. Bites attributed to it have been 100% fatal and death has occurred in a few minutes. In ten years of experience in Cairns Hanbrit has known only one case of snakebite which may have been taipan. This was a Malay girl of Hambledon, near Cairns. Walking home from the pictures one night, barefooted, she was bitten on the foot and was dead in a minute. The doctor did not say who held the watch! Anyhow, he doubts if any one, especially if alone, could work fast enough to do any good with antivenene injections in the case of a taipan bite. The recommended dosage of tiger snake antivenene, given partly intravenously and partly intramuscularly is 20,000 units. The serum comes in 1500 unit ampules of about 6 cc. A 20 cc syringe is recommended for speedy injection of the initial intravenous doses. This and 13 ampoules of serum (which is supposed to be kept in refrigeration) would have to be carried by each man at all times if the party is to go into the field fully equipped to experiment with tiger snake antivenene for treatment of taipan bites. It seems to me that a simpler and better insurance would be to get a pair of army leggings, and wear them.

Saturday, March 6

Strike still on. Army bombers (Dakota "Biscuit Bombers") now flying food to some parts of the country. Strikers at mass meetings yesterday all voted to hold out with the strike. The government dilly-dallying, knowing well that strong action to break the strike would lead to a general strike throughout the continent.

On our itinerary, based on the scheduled running of the boat for Thursday Island, we had until about this time in March to assemble in Cairns and start reorganizing our gear for work on the Peninsula. There are good collecting localities within practical reach of Cairns by road transport, which is not affected by the strike so far, but until our New York cargo arrives we can do only limited work. From now on, we will therefore be losing time owing to the strike. The strike might end in a matter of hours, or it might go on for weeks. However there are reports that the strike leaders are losing the support of the men, and experienced observers predict that the strike will be over soon. Many families have been without a pay check for four weeks, and the unions are said not to have big reserve funds.

This morning Geoff and I set out with Gilbert Bates to drive to Mossman, 52 miles north of Cairns, in Bates' old Bedford pick-up. About 20 miles from Mossman something went wrong in the gearbox, affecting top gear, so we limped back on second.

Found a good locality for limited collecting at Sweet Creek, about 15 miles north of Cairns. Savanna-forest on a widening of the narrow coastal plain; rain-forest along the creek and up the mountainsides; a summer camp on the beach, called Palm Beach, where we ought to be able to get the use of a cottage to camp in.

The Mossman Gorge, three miles up the Mossman River from the town of Mossman, should make another good site for a collecting camp for mammals. I camped there for a week or more in 1932; got a very good collection of rain-forest plants, including several new ones. There one is on the edge of vast, undisturbed rain-forests covering rugged country that reaches far back into the mountains. Today I wanted to contact old friends who could help us in that area, but all I achieved was the collection of a few more soil samples for Pfizer & Co., who are carrying out work in antibiotics back in New York.

Sunday March 7

The rains broke yesterday with a remarkable silvery display of light streaming from the setting sun through black clouds over the mountains. Today was hot and steamy.

Today we reached Mossman without mishap in Bates' official car. Splendid scenery along the Cook Highway, which connects Cairns with Mossman and Daintree. Curving bays with clean sand beaches. Rocky headlands jutting into the sea. Dark mountains piled up behind the coast. Sparkling rain water from the mountains rushing across the road in innumerable gullies and small creeks carried in invert crossings. And practically no traffic. Gasoline is rationed.

After lunch in one of several small hotels in Mossman, we were driven out to the gorge by Harold Lane, manager of the town hydro plant. Following a narrow road which sidled along the south side of the gorge through magnificent tall rain-forest littered with giant boulders of granite, we came to the powerhouse in about a mile from the edge of the sugar fields. About another quarter mile up the gorge was the intake, on Rex Creek, a large feeder of the Mossman. Climbing aroids of several species grew in unusual quantities on the trunks of the big trees; some sending out their fleshy leaves radially, some spreading their leaves flat on the bark of the trees and clinging as close as a creeping moss. Shade-loving ferns covered the rocks. Clear cool water rushing white over and between rounded rocks, or swirling and eddying slowly in pools of pale emerald green in the river. Blue and black Ulysses butterflies in zigzag flight over a sandy swimming beach below the powerhouse. Sixteen years ago, when I collected here, the gorge could be penetrated only ½ mile or so by a cut track. The hydro plant was installed in 1938. The only disturbance to vegetation is the road, and a narrow strip cleared for the buried 6 inch pipeline which supplies Mossman with water.

Mossman Gorge a perfect place for a collecting camp in rain-forest. Room for two or three men at the caretaker's quarters at the power house. Cut tracks go 2000 feet up the sides of the gorge and to the summit of Mt. Demi (ca. 3500 ft.). The one drawback is that the Gorge has been declared a national park. Lane drives out to the powerhouse twice a day and would do our transport.

On way back from gorge we called in at Mango Park sugar plantation. One of the original plantations, established over 50 years ago and one of the few properties that have not been sold to Italians. Owned by Mrs. Johnston and family, who were very kind to me back in 1932. Fine plantings of ornamental trees and shrubs about the old bungalow.

Met Arthur Taylor, pest control officer exployed by the local sugar farmers. Were his guests at the bowling club, where we met a number of the townsmen and sugar growers. Men and women, in white, trundling bowls on a green lawn. Background of sugarfields and cloud-topped dark mountains. Pleasant sight.

Monday March 8

Inquiry at the Lands Office showed that Mossman Gorge has not been gazetted a national park. It is only a timber reserve, and we are free to do any kind of collecting in timber reserves. Mr. Sharman, manager of the Regional Electricity Board, has granted us permission to camp at the power house in the gorge.

George and Van returned this evening with 63 mammal specimens in all. About 30 bats of six species collected by George in the Chillagoe caves and in mine shafts at Lappa Lappa and Irvinebank, and preserved in pickle. Collecting on the Maalan-Suttee Road was hampered by extremely wet weather most of the time, and by disturbance as a result of road-making operations with bulldozers and explosives. The catch from there includes a good series of Rattus assimilis and two specimens of Uromys. But the great prize of the whole trip was the purchase by Van of four very good pickled specimens of Acrobates, the rare marsupial flying mouse. Bought them for 10/- a piece from Mrs. N. B. Palmer of Ravenshoe. When Mrs. Palmer's cat started bringing in Acrobates last year, she knew their rarity and put them in a bottle of methylated spirits. In that way she got five specimens. One of these was sold last year to a man (name unknown) who was collecting for an American museum. Van's purchase comprises three females and one male. The specimens came from savanna-forest. Results of the trip very satisfactory in general. Van's specimens are beautifully prepared. But he has yet to learn to work fast as well as well.

Tuesday March 9

The wharfies are unloading the Mackay cargo of the Time so that the ship can go on to Bowen with foodstuffs. Railwaymen trickling back to work - 130 trains ran today. Six bombers arrived in Cairns with 27000 lbs. of flour for outlying communities.

Scouring the town for collecting supplies. Plans for Van and Geoff to work in the Mossman Gorge. George making arrangements for a visit to Devil Devil Creek, in the mountains between Mossman and Julatten, where he has a report of a mammal which is probably Hypsoprymnodon, a curious pygmy kangaroo. The Mossman Gorge camp will be a shaking-down trip and introduction to insect and reptile collecting for Geoff, with Van as instructor and demonstrator in techniques. Mammals will also be collected.

Having some trouble in gathering together makeshift collecting supplies. As a substitute for tow we have plumber's hemp packing, which has to be unravelled and teased out by hand. For packing dry insects, in boxes, we have sheets of black wadding of a kind used for padding by milliners. A pharmacist offered to make up killing jars for me. Having no plaster of paris, which is very scarce in Australia, he begged some dental plaster from a friend across the street. Results, a paste in the bottom of the jars which will not set.

Evening spent at the monthly meeting of the Naturalist's Club, where George gave a good talk on comparisons between South America and Australia.

Got away, by air freight, our first lot of soil samples for Chas. Pfizer & Co., New York; 35 samples - about half collected by George, and half by myself. Air Freight to San Francisco, on a parcel weighing about 1-2 pounds, was 34/3. Air freight on to New York will be extra.

Monday March 4

Inquiry at the Lunar Office proved that Bessen Bores has not been granted a national [illegible]. It is only a taxicab [illegible], and [illegible] to do any kind of collecting in Indonesia. [illegible] Warren, manager of the Regional Constructivy Board, has promised to [illegible] the [illegible] in the power house in the gorge.

Sasse and Van [illegible] this evening with [illegible] [illegible]. Among 20 bale of [illegible] collected by Sasse in the Chilli [illegible] and in mine shafts at [illegible] and having [illegible], [illegible] in place. Collecting on the Mexican-Sutter Road was [illegible] by [illegible] wet weather most of the time, and by [illegible] as a result of [illegible] machine operations with [illegible] and explosives. The [illegible] from there includes a [illegible] series of [illegible] and two specimens of [illegible], but the great bulk of the whole trip was the purchase by Van of four very good picked specimens of Agrotypus, the rare marsupial flying mouse. Bought them for 1/- a piece from Mr. H. B. Palmer of Haywards. Mrs. Palmer's cat started bringing in Agrotypus last year, she knew their [illegible] and put them in a bottle of methylated spirits. In that way she got five specimens. One of these was sold last year to a man (name unknown) who was collecting for an American museum. Van's specimens comprises three females and one male. The specimens came from [illegible] forest. Results of the trip very satisfactory in general. Van's specimens are beautifully prepared. But he has yet to learn a more fast as well as well.

Tuesday March 5

The [illegible] are [illegible]. The [illegible] cargo of [illegible] so that the ship can go on to Bowen with [illegible]. Railwaymen [illegible] work - [illegible] trains ran today. Six bunyers arrived in Cairns with 27000 lbs. of flour for outlying communities.

Touring the town for collecting supplies. Plans for Van and Geoff to work in the Bowman Gorge. Gorge having arrangement for a visit to Devil Devil Creek. In the mountains between Mt. Sam and Mulgrave, there is a record of a [illegible] which is probably Lysosphyrion, a curious [illegible] kangaroo. The Bowman Gorge camp will be a [illegible] trip and introduction to insect and reptile collecting for Geoff, with Van as instructor and demonstrator in technique. Mammals will also be collected.

Having some trouble in returning together because of collecting supplies. As a substitute for [illegible] hemp [illegible], which has to be unravelled and teased out by hand. For [illegible] in boxes, we have stocks of black wadding of a kind used for padding by milliners. A pharmacist offered to make up [illegible] for me. Devil no alcohol of paris, which is very [illegible] in Australia. [illegible] general [illegible] from a friend across the street. Hoadley, a [illegible] in the bottom of the jars which will not set.

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Wednesday March 10

Sitting all night the Qld. parliament passed, with only 3 opposing votes, a strong bill forbidding picketing, etc. At Mackay the poor old Time struck more trouble. Men ceased unloading after a stopwork meeting.

George Brooks came to our rescue and made up two good killing jars; Van has a lot of makeshift tow unravelled, and all is ready for a week's work in the Mossman Gorge

With Stephens, George and Van visited the flying fox camp three miles out of town only to find the beasts gone. These bats move about, following the flowering and fruiting of various trees.

Another bat-hunting excursion in the evening. George, Van and I with Mr. and Mrs. George Brooks and their two small boys to Barron Waters, in the mouth of the Barron Gorge. A delightful spot, run as a tourist season pleasure resort by Mr. and Mrs. Bob Hunter. Got there too late in the evening to see much of the surroundings. On the north bank of the river. An old clearing in the rain forest, with several low rambling buildings, including a museum and a tea house, a garden of papaws and bananas, and various ornamental trees and shrubs. "Development" has been done very simply and informally. Mountains rising high and hemming in the place on three sides. Tall rain forest all around the clearing. The fast flowing Barron River, here about 60-80 yds. wide, and somewhat muddy after the rains, has tall casuarinas in the forest of its banks.

Brooks had told us of numerous small bats flying at dusk, and tube-nosed bats hanging on the Hunter's radio aerial. We saw both, but could not get a shot at anything. After a good chicen dinner, eaten by the dim light of an Alladin lamp (there is no electricity here, within a couple of miles of the hydro plant that supplies Cairns), George and Van jacked for other mammals, guided by Hunter, while I diverted the attention of three noisy small boys and their mothers. The hunters saw nothing to get a shot at.

The Hunters live a pleasant sort of life not accompanied by hard work. Both keen naturalists, they live in surroundings which are a naturalist's paradise. Their museum collection of insects, also artifacts, and so on, helps to attract tourists in the winter months. Cairns people drive out there to swim, fish, and relax in the summer season. Hunter does some commercial collecting and rearing of insects for dealers in the U. S. From the Hunters we heard more tales of strange mammals, this time inconspicuous creatures, which live in the rain-forests and are seldom seen even by those who have the time and inclination to seek and observe. There is a rare small creature (possibly Petaurus) which climbs big trees in a series of vertical jumps, with all four limbs spreadeagled. Yesterday, Hunter's two blackboys uncovered under some old rubbish, killed but did not keep, a small bluish rat quite strange to them. A pleasant evening, yarning in the living room, and roaming in the night, listening to animal sounds, and watching the lights of the hunters flashing into the trees.

A new night noise to me was the calling of the Surinam Giant Toad (Bufo gigas), introduced some years ago to control cane beetles, and now spread all through the coastal and near-coastal country adjacent to cane-growing areas, and eating up all kinds of beetles. The dog rushed out to the edge of the rain-forest now and then to bark at wild pigs. Wild pigs do much damage on cane farms in the Cairns area and there is a bounty of L.1 on their snouts.

There is much dissatisfaction with the lax administration of the fauna protection acts. A lot of feeling against the Italian cane farmers on the part of nature lovers. Firearms were taken away from all Italians on the outbreak of World War II. Now they have them back, and are following their usual custom of shooting all sorts of birds for the pot. They even slaughter laughing jackasses, their "Ha-ha pigeon," a bird which no Australian bushman will molest.

Thursday March 11

Van and Geoff left for Mossman by White Car service at 8 am. Had arranged with Harold Lane to take them to the powerhouse in the Gorge, where they will camp.

A cordial letter from the Shire Council of Cardwell, suggesting that we extend our itinerary to include the Herbert and Broad Water Gorges and the islands of Rockingham Bay. Another letter from the Qld. Dairyman's Organization of East Barron, asking advice on stocking freshwater streams with fish. Heard by word of mouth that we have chartered a vessel for marine investigations along the coast.

These are penalties for being in the news. The best story of all is that plants and mammals are just a blind. What we are really here for is to search for uranium ores and sands. I heard that one on the Peninsula, and the same rumor is circulating in the mining country that George visited last week. What else could we be doing, poking into odd places, and collecting samples of dirt - for Chas. Pfizer's antibiotic research labs.

There was no fooling about a bat-hunt George and I did this afternoon with Laurie, production engineer of the Cairns Regional Electricity Board. The place was the hydro plant at Barron Falls, near Kuranda, where the Barron River tumbles over the edge of the Main Divide in falls and cataracts 1200 ft. high. I'm not sure that either of us would have faced it had we known what we were in for. The first part was a comfortable drive up a splendid military highway which took us to the top of the divide in half an hour from Cairns. An up and down track through rain-forest took us to the power station headquarters on the brink of the tremendous gorge below the falls, where Laurie parked his car and we were joined by Vautin, the superintendent. It was then that we heard of a haulage way, called the "skip", and saw it. A pair of rails about 18" apart, with greasy black rollers set between them every few yards and revolving under the pressure of a wire cable which was being drawn up over the edge of the gorge by an electric winch.

George went back to the car for something he found he had forgotten. The winch was still winding when he got back about 10 minutes later. Then over the edge toward us came a little trolley, a low flat-topped affair about three by five, with something that looked like a section out of someone's cellar stairs bolted to the top of it. There were five steps to the section of stairway. Laurie and Vautin hooked their buttocks over the second step and set their feet on the lower one. George and I arranged ourselves likewise on the third and fourth steps, and against the fifth was placed a half kerosene can in which George had his flashlight, hypodermic, and odds and ends of collecting equipment.

The first part of the descent was right enough and done at some speed. I caught a glimpse of the falls through trees to the right, and

There is much dissatisfaction with the lax administration of the game protection acts. A plot of feeling against the Italian game farmers on the part of nature lovers. Firearms were taken away from all Italians on the outbreak of World War II. Now they have them back, and are following their usual custom of shooting all sorts of birds for the pot. They even slaughter laughing jacasses, their "ho-ho pigeon," a blue ribbon in Australian business will molest.

Thursday Noon II

Van and Noel left for Rosebud by white car service at 8 am. Had arranged with Harold Lane to take them to the powerhouse in the horse. Were they will camp.

A cordial letter from the Shire Council of Cranbourne, suggesting that we extend our itinerary to include the Western and Eastern Corses and the island of Rosebud Bay. Another letter from the Fish. Fairmont's Organization of Fear Barron, asking advice on stocking it. Master surgeons with fish. Heard by word of mouth that we have chartered a vessel for marine investigation along the coast.

There are penalties for being in the news. The best story of all is that plants and animals are just a blind. What we are really hard for is to search for running ores and sand. Heard chatter on the phone, and the same about a clearing in the Australian country that Dorothy visited last week. That also could be false, so the info. Jones, and collecting agents of - for Chas. Gilmore's exhibits w. around Lee.

There was no fooling about a bet-last George and Ed this afternoon with Myrtle, population director of the Shire Recreational Executive Board. The place was the Bryan plant at Berwick Park, near Cranbourne, where the Narron River tumbles over the edge of the Main Range in falls and cascades fifty ft. deep. I'm not sure that Myrtle or Ed knew how fast it has or known what we were in for. The first part was a comfortable drive up a splendid military highway which leads up to the top of the divide in half an hour from Melbourne. Then it was down through rain-forest back to the power station headquarters on the brink of the tremendous gorge below the falls. There Laurie Marsh, the director, we were joined by Martin, the superintendent. It was then that we learned of a unique way, called the "skip", to see it. A skip of rails about 50 yards, with an open motor car set between them every 1/4 yards and involving under the pressure of a wire cable which was pulled up over the edge of the gorge by an electric winch.

George went back to the car for something he found he had forgotten. The sun was still shining when he got back about 10 minutes later. Took over the edge roaring in came a little thunderstorm, a lot flat-topped dolly from three by five, with scattered bushes like a section of a golf course. Rain came, hailstones bolted to the top of it. There was a flash as the section of a railway. Laurie and Martin hooked their battle over the second step and get down front on the lower one. George and I were so under the lightning on the third and fourth steps. The rain at the fifth was placed a half kerosene can in which George put his flashlight, lighter, etc. and one end of a rope, 3 ft. long.

The first part of the descent was right among the rain as some speed. I caught a glimpse of the falls through trees to the right, and

high on the opposite side of the gorge I noticed a seepage-wet rock-face on which I thought Impatiens ought to grow, if it had crossed to Australia from New Guinea and earlier collectors had missed it. Then our pace slowed, and looking ahead I saw the rails curve over the edge and drop out of sight. I took a glance at George. He was looking ahead, too, and saying nothing. The engineers were discussing voltages, or Y-circuits, or something. By this time we were no longer hooked over the stairs. We were sitting flat, and I had got my feet braced for a quick jump in case the 1-inch cable should part. That was no good, of course. We would shoot to the bottom in Buck Rogers fashion if that wire gave. Leaning over in front of George I tried to get a photo of the falls, then in full sight, but looking through an eye-level view finder took me too far from the trolley.

I had settled down to enjoy the view by the time we neared the bottom of the haulage way, but not the bottom of the gorge. That was a hundred feet or so below and the rails cut off short, without any backstop. The winchman could not see us, but he must have had his cable marked, for we stopped exactly opposite the end of a zigzag path which led down another little way to the mouth of a twelve-foot tunnel, and about ten feet from the end of the rails.

The rest was just an ordinary bat hunt, with the addition or disadvantage, of electric lights. The tunnel had a 700 foot vertical drop from the top of the falls but sloped on an easy gradient for walking. We walked between another set of trolley rails, with a 3 foot water flue on one side and a 3½ foot flue on the other, George with our only gun and the rest of us with many-forked sticks with which to swat bats.

The roof of the tunnel dripped. A row of electric lights blazed like a string of bright beads disappearing in dim distance up the slope. The bats were there, but not many of them. They were fast on the wing and had plenty of room to dodge. And when they came close they were hard to see in the glare of the lights. George fired a few shots and got one. Dropping behind the other men, I noticed that when all was quiet the bats soon came to rest in dark crevices. As a rule they were out of reach of my short stick, but I got one too.

The still air of the tunnel was sultry and I was sopping wet with sweat when I reached the bottom of a 50 foot shaft and climbed a ladder to fresh but equally hot air at the head of the main waterfall. Back at the winch station, quarter of a mile away, I found George and Laurie lounging in the shade. Vautin had got his own gun and gone down the skip again, with another engineer as companion. They brought back two bats. Net result, two specimens of Scoteinis sp. and two of Rhinolophus sp., which probably represented the species population of the tunnel. At least, we hope so.

Daily output capacity of the Barron hydro plant is 3800 kw. The difference between that and demand of 6000 kw. is supplied by diesel plants in various parts of the area served by the Board. A great increase in power could be got from the falls, but the original planners showed lack of foresight, and alterations to the existing plant would cost too much. The Cairns area is short of electricity, as it is of piped water, and this in a mountainous country with the highest rainfall in Australia. Preliminary work is in progress on a scheme for harnessing, or generating power from, the great Tully falls, about 100 miles from Cairns. Planned output there, 40 to 50 thousand kw per day.

[illegible] the opposite side of the gorge I noticed a passage-way [illegible] [illegible] [illegible]

Friday March 12

Somewhat of a social day, mixed with paper work. No precise information on the Time, but the agents opine that, all going well, she could arrive here by the 24th. The Wandana agents think that ship might be here by the 31st. The strikers are allowing the Time to unload at Bowen and Townsville, but the owners will not let her leave Townsville for Cairns until she can take on more bunker coal. Looks like an end to the strike on Monday.

Had morning tea with the president (McManus) and secretary (Wyer) of the Cairns Harbour Board. We are offered the use of a motor launch for work in the harbor, where I hope to collect Sargassum material for Parr.

In the evening we were the guests, and George the guest speaker, at a meeting and high tea of the Legacy Club. Name of club derived from the legacy of responsbility recognized by local bodies of substantial ex-service men for the care of war widows and orphans. Each individual member looks after the affairs of two or three families. The movement started in Tasmania, took hold throughout Australia, and has recently spread to England.

Saturday March 13

Only a few showers have fallen through this week and today there is a dry feeling in the air. The big rains always end about the end of March. Heavy rains could fall between now and then, but even if they do they can hardly be enough to save the north from a severe dry season. Thompson of Coen writes that rainfall there is well below average, and predicts early grass fires. A severe dry season will be against us on the peninsula.

In afternoon Mr. and Mrs. Bert Hunter drove George and me out to Barron Waters, where we had afternoon tea under the trees of the rain-forest, and walked some little way up the gorge. Bob Hunter has done an enormous amount of intelligent work in developing his sylvan tea gardens. A beautiful, restful spot. Native nutmeg trees surprisingly abundant in the forest, and Hunter says the place was formerly a haunt of the nutmeg pigeon.

Sunday March 14

Lunch with Mr. & Mrs. Stephens, then a drive to Pretty Beach, about 28 miles north of Cairns along the Cook Highway, in search of bats. A pretty spot, indeed! Rather steep beach of clean pale sand, edged with Casuarina trees and brushy rain-forest, and ending to the north in a headland of bare, jagged rocks. Quantities of Sargassum left on the beach by the receding tide. But no bat cave. Stephens much put out about leading us on a false trail, and Mrs. Stephens even more upset because she found she had brought everything for afternoon tea, except the tea.

Finally Stephens remembered where he had seen the bats, and we drove back along the road about three miles to Hartley's Creek, had afternoon at Evan's tea house, then drove down to the beach. The bats were in a deep, narrow, upward-tapering fissure in the granite of a

[illegible]

[illegible]

[illegible]

promontory known as White Cliffs. Only two specimens seen, and both badly shot up by George. Tomb bats (Taphyzous), which clamped themselves closely to the walls of the fissure and refused to be disturbed by noise or the flashing of a head lamp.

Monday March 15

In all churches in Brisbane yesterday prayers were offered for the strike to end. According to Howard Smith Lt., agents for the Time, nothing has happened yet.

George was picked up by Abbiss of Main Roads about 9 am and left for Devil Devil Ck., on top of the Dividing Range, between Mossman and Julatten. He will stay with a farmer. Main object of trip - a search for Hypsoprymnodon. Expects to return to Cairns on Friday.

Tonight I am in the Mossman Gorge with Geoff and Van. Gil Bates, visiting Mossman for a few days on pest control work, drove me to Mossman, and on to the powerhouse in the gorge after supper. Bates was also good enough to lend me a camp cot and bedding, to which Mrs. Bates added sheets and a pillow. Have my cot on the dirt-floored verandah of the caretaker's quarters. Geoff and Van are in a tent borrowed from Main Roads. A camp with modern conveniences - electric light, stove and jug, plus a rather antiquated telephone.

Was amazed to find in camp a woman, a Mrs. Maggs of Mossman, who had walked out from the town with a lunch basket and spent the day in the gorge reading Huxley's book on the voyage of the Rattlesnake. Unusual sort of person; student of history of exploration in the North. Before returning to town with Bates, she told of a woman in the Kennedy district, who, about two years ago, shot a strange beast in her chicken house which no one in the area could identify. A marsupial tiger thinks Maggs. The lady buried the beast. Maggs offered to ask the lady to dig up the remains and send them to us.

Tuesday March 16

Over an inch of rain last night and more very heavy showers this afternoon. Rubbed soap on my ankles before going out botanizing in morning, but as I ate lunch a big black leech, gorged with blood, rolled down my leg to the ground. Geoff picked up several leeches too.

The rain washed the bait off Van's traps and over 50 sets yielded but one common grey rat. A morning in the rain-forest, at the intake ¼ mile above the powerhouse, gave me 24 numbers of plants, mostly mosses. Among four spp. of Hymenophyllaceae, all small plants from the granite rocks, was a beautiful little thing with flabelliform leaves barely 1 cm broad.

Geoff wielding his net with pleasing enthusiasm and showing good promise as an insect collector. Chasing dragonflies along the creek, catching butterflies in open places in the forest - where lantana grows, and turning over rubbish for beetles.

Wednesday March 17

Heavy rain last night and more this afternoon brought the total since Monday evening to almost 5½ inches. River running with force, but clear. It drains country which has not been disturbed by cultivation.

promontory [illegible] White Cliffs. Only two sorts [illegible] seen, and both [illegible] Tomb bats (*Taphozous*), which clamped themselves closely to the walls of the fissure and refused to be disturbed by noise [illegible] of a headlamp.

Monday [illegible]

In all [illegible] in Brisbane yesterday [illegible] were [illegible] for the [illegible] to end. [illegible] to Howard Smith Ltd., agents for the line, [illegible] nothing has happened yet.

George [illegible] Main Roads about [illegible] left for Devil [illegible] on [illegible] of the Fishing Range, between [illegible] and Julatten. [illegible] main object of trip - search for *Hypsiprymnodon*. [illegible] to return to Cairns on Friday.

Tonight I [illegible] to the Norman [illegible] and Van [illegible] visiting [illegible] a few days on [illegible] drove me to [illegible] There was also [illegible] to which Mrs. [illegible] adjo[illegible] the [illegible] verandah of the [illegible] from Main Roads. [illegible] conveniences - electric light, stove, and [illegible].

[illegible] a woman [illegible] of [illegible], who [illegible] the day in the [illegible] before [illegible] with [illegible], she [illegible] woman in the Kennedy district, [illegible] in her chicken house [illegible]. A [illegible] Tiger [illegible]. The [illegible] to ask the lady to [illegible] to the [illegible] to us.

Tuesday [illegible]

Over an inch of rain last night [illegible] this afternoon. [illegible] and botanising [illegible] a big [illegible] covered with blood, [illegible] several [illegible] too.

[illegible] over 50 [illegible] in the [illegible] of the [illegible] above the [illegible] numbers of [illegible] from the granite [illegible].

[illegible] his net [illegible] good [illegible] collection. [illegible] above the creek, catching butterflies in open places in the forest - where [illegible] grows, and turning over [illegible] for beetles.

Wednesday [illegible]

Heavy rain [illegible] this afternoon brought the total [illegible] to almost 5½ inches. [illegible] running with force, but [illegible] country which has not been disturbed by cultivation.

Collected along about a mile of river bank, sometimes in the forest, but mostly scrambling over the great rounded granite boulders edging the stream. Kept a lookout for platypus, said by locals to be in the river, but saw none. Only one rat in Van's traps. He hunted with a light late into the night and shot a very small rain-forest wallaby which seems to be new to the collection. Showed Van several rain-forest plants - Dracaena, Balularia, Musa, etc. - whose fruits are being eaten by mammals.

Was visited in evening by Bates and Taylor. Lane hunted with Van for a couple of hours.

Thursday March 18

A long morning in which Geoff and I followed Rex's Ck. from the power plant intake to the junction of this big creek with the Mossman. Hunting insects. Turned over logs and stones, dissected bird's-nest ferns, tore mats of ferns and other vegetation off rocks, and got little for our pains. About 200 yards above the town water supply intake we came to a beautiful open spot where the granite outcropped in a whale-back ridge practically bare of vegetation and exposed to the sun. The top of the ridge was not far above the ~~xxxxx~~ level of Rex's Creek, but on the downstream side it sloped smoothly and steeply to a small tributary stream, about 30 feet below. Hunting dragonflies along the top of the whaleback, we noticed a strong sulphurous smell, and investigating, found it came from a spring which issued from a horizontal crack several feet wide on the smooth lower slope of the granite. The water of the spring was cool where it came from the rock in not much more than a strong trickle. The sulphur smell was strong, and there was a thin precipitation of whitish substance where the water came from the crack.

I left Geoff collecting dragonflies and damsel flies at the foot of the whaleback, where the sulphur water trickled down the rock into a deep pool edged with bushes and bright green tussocks of a grass-like plant. Butterflies were plentiful too, apparently attracted by the sulphur smell.

Continuing down a rock-cluttered slope through the forest, parallel with the Rex, I turned over more rubbish and collected a few more insects. Probably I was getting careless, and trusting too much to the basketball shoes I was wearing. Anyhow, as I eased myself down a crevice between two big rocks my right foot slipped. A two ounce jar in my trousers pocket was broken into small fragments against the rock, cutting my thigh and giving me a nasty bruise. The cut of course was well disinfected with alcohol and the juices of crushed millipedes and crickets, and I daresay it will give no trouble.

Before lunch we had our usual swim in a swirling emerald-green pool in the river. A delightful spot, complete with a clean sandy beach, and an imposing view up the gorge between richly vegetated banks to dark, cloud-topped mountains near the head of the river. Umbrella trees, growing as epiphytes on mossy big trees along the river banks, were red with opening flowers. The finest of all the local damselflies, a big insect with pale blue body and half-black wings, kept out of reach on rocks in the stream. Another damselfly, so slender that it could only be seen when it moved, hovered about the tips of bushes like a wisp of glistening cobweb.

No less than seven visitors in camp this evening. It is nice of them to come, and bring cakes and ice cream, but they are a nuisance in a camp where there is night work to do. Mammals don't keep.

This has been a good day for mammals. Two rats in traps; four small bats brought in alive by Lane's linesman, who found them in a crack in a power line pole; and a big "scrub" wallaby, probably a paddymelon, shot after the visitors departed.

I took part in this night's hunt, carrying a 410 gun on loan from Arthur Taylor. The rain forest very still, and it smelled good, as we worked slowly up the road to the intake. A few crickets and cicadas calling, and now and then a sharper and deeper sound, high among the trees, probably from tube-nosed bats. No movement except an occasional firefly until Van heard something back a little way in the forest, caught its form with his light, and shot his wallaby. Only green spider's eyes caught with our lights. In some places, when our lights were turned off, wood rotting on the ground gave off a soft phosphorescent glow.

Friday March 19

Left the Mossman Gorge at 2 pm and arrived Cairns about 8.30. Van with 25 mammals, Geoff with a fair collection of insects, and myself with about 45 plant numbers. A good deal of my time was spent in search of an extremely rare member of the Podostemataceae which has not been collected since it was discovered rather south of here by Walter Hill in 1874. No luck in this. The best mammal in Van's collection is a marsupial mouse of rich, rather chocolaty brown color; next a pair of Melomys sp., the first of the genus (centered in New Guinea) which George has seen in Australia.

We were driven into Mossman by Harold Lane, and from there traveled to Cairns by White Car Service, via Port Douglas. Before we left Mossman, George arrived from his collecting locality near Julatten, with a Main Roads overseer. George happy with a Hypsoprymnodon, a female, shot in the rain-forest last evening about 5 o'clock. He, too, trapped a marsupial mouse, which, without close comparison, seems different from Van's. George has 20 mammals for his trip, including several small bats in pickle.

For mammals, which are the prime purpose of our trips out of Cairns, 45 specimens in not at all bad going for limited collecting for a week. George has made an offer to the son of his Julatten farmer hosts (Hannah) to pay 5/- each for ten specimens of Hypsoprymnodon preserved in formalin. This little beast evidently common in the locality, but obtainable only by patient still hunting in early morning and late evening. George saw several which he could not get a shot at.

Mails included a letter from Tom Gilliard saying he will be delayed in Papua and therefore will not be able to join us on the tip of the Peninsular on our delayed schedule. He mentions again that, according to instructions, his mission to the Peninsula was to train local collectors to collect birds.

Another letter contained a strong recommendation from the Ore Producers and Prospectors Association, of Mareeba, that we collect in the Herbert and Broadwater Gorges (ca. 100 miles south of Cairns). We

cannot consider such a trip with the limited time we still hope we have at our disposal.

The strike news, and news of the "Time" that all men are waiting for" is not bright. A day or two ago there was a demonstration in the streets against a new non-picketing order, and the one Communist member of parliament, a Rhoades Scholar named Patterson, who was watching the procession from a sidewalk, got knocked on the head by a blow that put him in hospital. Result, a complete stoppage of work by all wharfies, which prevents unloading of Townsville cargo on the Time. The man on the street now anticipates bloodshed before the strike ends.

Saturday March 20.

All hands working on collections in forenoon. In pm George and I, with Mr. and Mrs. Bates, on a drive south to near Babinda to spy out the land for further collecting.

On the southward drive we reached Cucania, opposite the south end of the Bellenden Ker Range, where Mr. W. Kerns was expecting us. Formerly a teamster, now a prosperous sugar farmer with a taste for expensive orchids which he grows in a slat house, Kerns has climbed Bellenden Ker seven times. In 1931 or 32 he took Chauvel of MCZ to the top in search of seeds of Garcinia Mestoni, known only from this mountain, and needed for experimental work on mangosteens in the U. S. Chauvel did not know the tree, nor, at that time, did Kerns. Their mission was a failure. But on a later trip Kerns found that he and Chauvel had made their camp fire at the base of a Garcinia tree. Kerns still marvels at the skill of Chauvel with a .32 pistol. Brought down two possums, each with a single shot, as they played in a tree the night the party camped on Bellenden Ker.

Discussed arrangements for a visit to Bellenden Ker in the event that we have time to consider it. Kern's son, Bill, would act as guide, and we could depend on getting two or three men to carry for us. From Bellenden Ker railway siding, about a mile south of Kern's house, where we had an excellent close-up view of the three main peaks of the range, Kerns pointed out the route to the summit. A steep climb of about 3000 ft. to the crest of a leading spur, then easier going along the spur to the final lift, at the foot of which, at perhaps 4000 ft., camp is made on the last water. Camp known as "TickCamp". Leaves of a palm growing there can be used to make a shelter. From Tick Camp the top can be reached (Central Peak) and the return trip to the lowlands made in one day. To do worthwhile collecting I consider we would have to stay not less than three nights at Tick Camp. For a lowland base we could use the labor barracks at Kern's farm.

On the way back to Cairns we branched off the main road at Gordonvale and took a side road to the cane farm of Mr. C. Thomason, at the foot of the Coast Range and its highest point, Bell's Peak, 3368 feet. Thomason a rugged Tasmanian now well past middle age, has handed over the farming to his sons and spends some of his spare time collecting butterflies and doing "fancy work" with needle and thread. With one of his sons as driver, he is planning a trip by 3-ton lorry to the Byerstown area to examine a selected bit of country for copper. Invites one or more of us to go with him - a 4 or 5 day trip if the weather is good.

Before supper with the Thomasons we drove about a mile through cane fields to the foot of the Coast Range to sum up possibilities for collecting. Thomason's barracks, about ten minutes walk from the foot of the range and the base of a long leading spur up which an old track goes to the top of Bell's Peak, would make a good base camp. The foothill slopes most uninviting. A type of savanna forest, twice cut over for firewood, and now overgrown with Lantana undergrowth. A four inch pipe line, taking water to Thomason's homestead, is said to go half a mile up the mountain side and lead one into good rain-forest. The savanna-forest peters out at a few hundred feet altitude. Patches of dead timber at 500-1000 feet in the rain-forest of the leading spur would probably be an obstacle to the climb up Bell's Peak. Jim Buzacott of the Merinda Experimental Farm (a son-in-law of Thomason) ascended Bell's Peak about eight years ago (4 hours up, 3 down) and offers to guide us if we decide to make the ascent during the Easter holidays. At least one night camp would be necessary to allow us opportunity to collect, and it seems doubtful if water can be got high on the range, or rocks or palm leaves for shelter.

Sunday, Mar. 21

George and Van on a motor trip to the Tully Falls with George Brooks and family. A round trip of 250 miles, via Kuranda and the Palmerston Highway. Visited a fruit bat camp near Atherton, only to find it deserted. Came home with a flying fox which had flown into a powerline, and a rat kangaroo and a possum killed by road traffic. A great many mammals are killed by cars traveling at night on the roads of North Queensland.

Monday, Mar. 22

Doing odd jobs and getting together collecting supplies for another bush trip. The arrival of some boxes which George left behind in Rockhampton upon the outbreak of the railway strike has eased the situation in mammal collecting supplies. The one newspaper office in town was unable to supply me with any old newspapers for drying plants, but sold me, at fourpence a pound, some "white waste" from the printing press, which I have to fold to size.

Choice of our next collecting locality lies between the Bellenden Ker Range, which is a national park and closed to us for zoological collecting, and the headwaters of the Cloezy River, which George and I will inquire into tomorrow on a trip with Stephens.

Wired V. Grenning, Director of Forests, for permission to collect mammals and insects in the Bellenden Ker National Park, and telegraphed Arthur Bell, Under Secretary, Dept. of Agriculture and Stock, asking him to support the application.

Geoff suggests, and George supports the idea, that two of us (George and Van) fly to Thursday Island and start work on the tip of the Peninsula with what gear there is here. Am not in favor. Such a move would mean sampling for mammals rather than collecting, with the small quantity of equipment and supplies available. And it would unbalance the whole expedition.

Tuesday, Mar. 23

The Townsville wharf lumpers commenced unloading the Time this morning. From inquiries made by me of Howard Smith & Co., and of Burns Philp, this morning, and by Geoff during the day, the situation seems to be: The Townsville cargo on the Time is expected to be unloaded by tomorrow night. Bunker coal is waiting on the wharf in trucks and there will be no difficulty about loading it on the ship. Four crew members were discharged yesterday for alleged "subversive activities." There may be difficulty in making up crew, and anyhow, with the Easter holidays in the offing, the ship is not expected to leave Townsville for Cairns before next Tuesday. There is no reply to my inquiry of Burns Philp as to whether the wharfies in Townsville will be willing to unload our cargo there if it is accessible on the ship - (Burns Philp's Dupain, not wishing to get his firm into the position of asking favors of the strike committee, or of incurring the strikers' displeasure, is against our trying to get our cargo unloaded and brought on to Cairns by rail or road). The District Superintendent of Railways (McLaughlin) is not optimistic re quick delivery of freight from Townsville; railway men expected to act up further there. About the only chance of getting our cargo from Townsville would be by motor truck. The situation is futile, to say the least of it.

George and I, with Ern Stephens, left town about 10 am on a visit to Myola and Koah, and returned after 6 pm. Looking into possibilities for a collecting camp, to be occupied over Easter, at Speewah, on the upper Clohesy River, on the west slope of the Dividing Range about west of Cairns. Speewah, the property of George Vievers, who owns extensive timber and cattle lands. The large "Striped Marsupial Cat," presumed to be the beast often called the "Marsupial Tiger", and unknown to science, is said to be "common" there.

At Myola, near Kuranda, we met R.R. (Rob) Vievers, brother of George. With a helper, he was out in the rainforest, loading logs on a wagon with a team of bullocks. It was he who had told Stephens about the striped cat. In years spent at Speewah as boy and man, he had shot five of the beasts. Body length about 20 inches, tail about 15 inches.

Decided to collect at Speewah. A letter left with a storekeeper at Kuranda in the hope that it will reach George Vievers before we arrive. Speewah is only 5 miles from the Cairns-Mareeba Highway, but the people seldom come to Kuranda, the nearest town, 12 miles away.

After lunch in Kuranda we went on to the Koah truck farming area on the lower Clohesy River, where an ex-AIF officer farmer, Gilmore, is cooperating with Stephens in testing various strains of tomatoes, etc. A one-man farm on which Gilmore appears to be having rather a struggle. Growing tomatoes and cabbages mainly. A fungus disease called blackleg is attacking his cabbages, nematodes his tomatoes, and bean fly his beans.

Led by Gilmore we visited a camp of spectacled fruit bats in the marginal rainforest on the bank of the Clohesy. Four specimens shot.

A telegram from the Forestry Department, not signed by Grenning, which says in effect that we will not be given permission to collect zoological material in Bellenden Ker or any other national park. The language of the telegram is that of the clerk, Trist, who holds that there is nothing in the national parks which we cannot get elsewhere. Any biologist, or forester, would know better.

A cyclone blowing off the coast, several hundred miles to the south and moving away from us. An abnormally high tide this morning, associated with the cycline, flooded parts of the town near the waterfront, and carried germinating mangrove fruits, and coconut husks, onto the streets.

Wednesday, Mar. 24

Telegraphed the Hon. Alfred Jones, Minister for Lands (which includes Forestry) for permission to do zoological collecting in national parks. My plant collecting permits already cover national parks.

Only news on the Time is that the wharfies have demanded and are getting an extra 6/- an hour "stench money" for unloading the ship. This sets a nice precedent for strikers to let potatoes and onions rot in ships holds.

Gil Bates called up to say that Wheeler, Stroud & Diddens, owners of a cane farm at Bellenden Ker, 1/2 mile from the cut track leading up the mountain, offer us the use of their barracks for a camp.

Thursday, Mar. 25

The third day of very hot weather. We feel like rinsed-out rags in the evenings. Thunderclouds threaten, the sunsets are red, and there is no rain to cool the air.

Through Burns Philp of Townsville, I have been trying to get our cargo unloaded off the Time. If that can be done, we can have it here by road by Wednesday or Thursday, and the "Yalata"is expected to sail for Thursday Island about the end of next week.

Preparations complete for collecting at Speewah over Easter.

Friday, Mar. 26 - Monday, Mar. 29

Away from Cairns on a collecting trip to Speewah, the property of George Vievers, in the mountains 8½ miles west of Cairns. Speewah "pronounced Speer-wah) is on Moonooba Ck., a tributary of the Clohesy River (tributary of the Barron River). The homestead, a largish galvanized iron house on high stumps is 1500 feet above sea level, in a clearing of perhaps 50 acres where the rainforest of the main range joins the savanna-forests of the inland slopes. Back of the house and clearing, toward the coast, Mt. Williams rises to 3200 ft. and Chujeba Peak to 3000 ft. During the last war there was an artillery post on one of the hills near the homestead, and a foot track leading through a gap in the range and down to Stoney Creek Station, on the Cairns-Mareeba railway, was to be used as an escape route from Cairns in the event that the Japs made a landing.

Speewah was established as a grazing property by George Veivers' father about 40 years ago. A big sandstone tombstone, stained dark with age and climate, marks the old mans' resting place in the clearing. Present activities are cattle grazing in the savanna-forests, and timber getting in the rainforests. The cattle are Brahmins or a Brahmin-Shorthorn cross. The timber is carried in the log by motor truck to Cairns. "Maple" is perhaps the most important of several species of trees cut for timber.

The Veivers are a typical pioneer family. Though only a few miles from Cairns in a direct line, they live in isolation. Few people will risk their cars on the 5 miles of road that connect Speewah with the fine bitumen road which links Cairns with Mareeba. It goes up and down over high hills and is badly washed out in places. Traveling out, we had a 30-cwt. truck and Ern Stephens' small Vauxhall car. The little Vaux flexed so much on the rough spots that the fan beat a big hold in the radiator. The outward trip, with the truck alone, took 40 minutes from homestead to highway.

Besides the four of us, our party included Ern Stephens and his wife, Gordon Stephens, and Alf Reid, the latter a staunch member of the Cairns naturalists' club and interested mainly in marine life. The Stephens and Reid returned to Cairns Saturday; Ern and his wife brought the truck back to Speewah Monday, and drove us down to Cairns. The truck on loan from Harold Armstrong, manager of the C.O.D.

The only modern convenience in the Speewah homestead is a battery-operated radio. Wood stove. Bathroom with one enamel wash basin and a mirror (bathing is done in the creek). Lighting is by kerosene burning hurricane lamps and wall lamps, and a small carbide lamp (of which only the carbide lamp gives enough light to read by). Mrs. V. complains good naturedly about having no refrigerator. All the money, she says, goes into buying more cattle. We brought our own food, which we ate in the dining room while the family ate in the kitchen, but we could see that the family food was plentiful and good, though rather short on meat for the time being. Vievers and his sons were going to kill a beast, but had not got around to doing it. The dogs - 4 or 5 - were on a diet of boiled sweet potatoes. A small dam of logs and concrete has been put in the creek, and from it water is pumped to the house by hydraulic ram.

Kindly, thoughtful Mrs. V. did all she could to make us comfortable. George had his hammock; I had a borrowed camp cot; the others were given beds of various sorts. When Mrs. V. baked scones or cookies, there were extras for us; besides fresh milk, and granadilla salad and junket. We paid back with baker's bread, and scarse butter, cheese and sugar. If the mess orderly for the time being - we took turns at cooking and dis washing - was slow, he would find his chores done for him. All this by an ample woman, no longer young, and not used to wearing the shoes she felt she ought to wear while we were her guests.

Some of the family had married and left home, leaving young George, living with his wife and young son in a cottage up the creek, and younger Morris, living with his

parents in the old homestead. Daughter Ivy, who works in Cairns, was home on vacation. A nephew, Austin, helped old George and the boys with the logging and lived as one of the family.

We visited Speewah chiefly to try for the striped marsupial cat which Rob Veivers had told us about, and which old George too had seen and shot in the neighborhood years ago. None of the younger generation had seen the beast. Van did the general trapping, while George (Tate) concentrated on hunting morning and afternoons for Hypsipremnodon, and at night for the striped cat. Van did night hunting too. For all this, only one bandicoot was shot. But Van did well with traps. A total of 30 specimens for three night's trapping with 45 traps; including a series of four good specimens of the marsupial mouse got before in the Mossman Gorge. The mammal prize was a single catch of a small rat that looks like Stenomys, a New Guinea genus not yet known from Australia.

Was disappointed in the locality for plants. Most of the few rainforest spp. in flower or fruit were trees too big to collect. The savanna-forests carried little besides the big eucalypts (blue gum, bloodwood, red stringbark, ironbark, Moreton Bay ash, podargie) and the dominant grasses. The most interesting type of open forest was a savanna-forest of Casuarina 18201, which is rather puzzling. The trees are generally 20-30 ft. high, and growing closely enough to form a thin canopy. They grow on steep hills of deep red soil, or of very stoney soil in which there are quantities of quartz. They also cover some flats of sandy loam which old photos show to have formerly been occupied by tall Eucalyptus forest. It is possible that on the hills too, Casuarina has come in after the felling of the original timber.

Two of the great vegetable curses of North Queensland coastal areas are much in evidence at Speewah. These are "Mackie's Curse" (Chrysopogon acicularis) and Lantana" (L. camara). The former is supposed to have been introduced by one Mackie of Gordonvale, as a lawn grass. Its barbed seeds have carried it far and wide in the tropical high rainfall region. At Speewah it completely covers parts of the clearing and has spread into the savanna-forests, but it has been found that molasses grass (Panicum sp.), if planted and not too heavily grazed, will oust it in a few years.

Lantana has fleshy fruits which are carried by birds. At Speewah it forms frightful tangles in the drier marginal parts of the rainforests, and occupies small clearings in the rainforests. It also spreads out into the savanna-forest. A bad feature of lantana is that it will burn in the dry season. Fire in the lantana is carried into the rainforest and in the aggregate, a considerable area of rainforest must be killed in this way in North Queensland every year.

In the usually severe dry season of 1946 there were many lantana fires locally destructive to rainforest in the Cairns area. The evidence is seen on the mountain sides. Areas of dead grey timber, usually in strips on spur ridges, from a few miles north of Cairns, where continuous rainforest ends on the coastal slopes of the Main Range, down to Fishery Creek on the north end of the Bellenden Ker Range, which brings one into the heaviest rainfall area of Australia, and is nearly as far south as I have been on land on this trip. On one of the long spur ridges of Bell's Peak, on the Coast Range, is a strip of dead rainforest said by Thomason to have been killed by a lantana fire in 1946. Information on lantana fires on the coastal slopes of the Main Range is from Bates, Stephens and from Carruthers, forest officer in Cairns.

The greatest destruction of rainforest as a result of lantana fires on the coastal slopes of the Main Rangeappears to be in the vicinity of Cairns, where it is evident that rainforest and savanna-forest are in a delicate state of balance in their competition for the occupation of lowlands and lower mountain slopes. It may be that, but for civilized man and his fires and introduced lantana, the tendency would be for rainforest to replace savanna-forest, rather than vice versa.

At Speewah it is plain that the "climatic" tendency is for rainforest to make territorial gain at the expense of savanna-forest. Along the lower edge of the rainforests of the higher mountains, and on the outskirts of the strips of rainforest bordering streams, is fringe of bastard rainforest in which the big old trees (red stringybark, blue gum, etc.) are savanna-forest species and the smaller trees and undergrowth belong to the rain-forest.

Tuesday, Mar. 30

Through Burns Philp I have been in touch with the Time situation in Townsville three times during the day. There now seems little hope of our being able to get our cargo unloaded there. Unloading operations by the slow-moving wharfies have not uncovered our crates. Apparently they are buried under the rest of the Cairns cargo in a hold which is not being worked at Townsville. Have made arrangements by which our cargo, if unloaded in Townsville, can be delivered in Cairns by road. The Talata should be leaving for the far north by the middle of next week and will land us at Red Island Point by special arrangement with the agents. Nice arrangements, if only we could take advantage of them.

The latest thing to go wrong is Van's health. Since the day we left for Speewah he has been below par, and at times running a temperature. Had him examined by a dictor this afternoon (Dr. Knott). Verdict, a mild form of collitis, common locally. Treatment, a laxative and rest. To which the medico might perhaps as well have added, no more ginger beer, no more soup, and no more ice cream - the three main items of Van's diet, when he can get them.

Wed. Mar. 31

With the end of the month die our hopes of leaving Cairns for the Peninsula before the arrival of the Time in this port. Our cargo cannot be got at at Townsville. The latest forecast is that the Time will bunker on Monday, leave there Tuesday, and arrive here Wednesday of next week. No one seems to know why the delay of four days between discharge of cargo and bunkering at Townsville. I have stopped guessing.

Arrangements made today for field work under the eastern slopes of the Bellenden Ker Range. Practically all of the Ballenden Ker Range, from where the standing rainforest begins at the edge of the canefields, is within the boundaries of the national park. But near where we will camp we can collect up to 800 ft. on private lands, and there is nothing to prevent us from collecting plants and insects up to the 5000 ft. summit of the range. My application to the Forestry Dept. for permission to do zoological collecting in the park has brought an OK on insects. They still hold out on mammals. And I am still at them for a revision of their first decision.

Our camp will be in the labor barracks of the Wheeler, Stroud & Giddens cane farm, on the Junction Ck. tributary of the Russell River.

Contributions to our collections from local people keep coming in. Today - two snakes and a bandicoot. All bandicoot specimens taken on the coastal lowlands to date belong to the genus Isoodon, while all the highland beasts are Perameles.

Thursday, April 1

The four of us got away from Cairns about 3 P.M. on a utility truck hired from, and driven by a chap named Woodward. Cost 3/10/- for the trip of about 32 miles. Called at Meringa Experiment Station to pick up a carbide lamp, loaned by Gil Bates. Also called at Kearn's farm at Cucania to say hello, and inquire if young Bill would be willing to guide us up Mt. Bellender Ker should weather permit the climb during our stay. Today and yesterday have been showery. Young Bill is willing. He and a friend climbed the mountain during Easter; camped 3 nights at Tick Camp.

Have a comfortable camp in the labor barracks of Wiemer, Stroud & Giddons, after we cut some of the tall weeds around the place, threw out a lot of old clothing left by last year's canecutters, and swept the cobwebs and horse dung out of the rooms. The doors had been left open and no doubt the horses sheltered here during rainy days.

We have a wood stove with broken grate, newly greased. Awful smoke and smell when Geoff lit the first fire. Beautiful, clear cool water is piped down from the mountain side for kitchen and shower room. The building is of galvanized iron with concrete floor. Crude, but a good camp for us.

Friday, April 2

15 rats, caught in 39 traps, plus 2 Dactylopsila which were brought from Cairns (brought in alive by Mr. Wiles, cane farmer of Smithfield, too late to be taken care of yesterday), kept George and Van busy at their skinning table most of the day. Both went jacking in evening - got nothing. The trapped rats were of 4 species.

Geoff collected near camp. Catch included good specimens of the big green and gold day-flying moth.

Spied out the foot of the mountain on a 4-hour walk south to Junction Ck. (about 1/2 mile) at the edge of the canelands, then up the rocky (granite) bed of the creek, crossing from side to side, until I was forced to leave it and make my way through trackless rainforest rather thick with lawyer-cane (Calamus). After perhaps 1/2 mile of this, came to the intake for our camp water supply in the pool below a pretty waterfall. Followed the pipeline down 2-300 yards to the edge of the forest, then down through the canefields to camp.

George in the late afternoon went up to the edge of the forest (ca. 1/2 mile) to look for the beginning of the track up the mountain. Found where young Kerns and his companion cut a path through dense raspberry thickets edging the forest, but failed to pick up the track in the forest.

Saturday, April 3

Only 3 rats from traps last night (mostly in second growth and forest edges). All traps moved to the primary rainforest on the lower slopes of the mountain.

Spent morning on a reconnaissance of the track up the mountain. Entered forest by the track cut through the raspberries and cast around for about 1/2 hour before I picked up the trail marked by recent blazes. Improving the trail as I went along, I climbed to 1750 ft. by aneroid in 2½ hours.

A steep trail up to 1350 ft., where I got to the crest of a razorback spur and the forest became fairly open underneath and the grades less steep. Below that level a climbing bamboo, hanging from the trees and looped on the ground, was a

nuisance - even a danger, on steep slopes where footing was bad.

Two running streams were crossed; one at beginning of the climb, the other in a very deep ravine. Where the latter is crossed, below a small waterfall, a huge "King-fern" (Angiopteris), with spreading massive fronds fully 15 ft. long, grows on the sloping granite which forms the bed of the stream.

A visit from Kerns, senior, re ascent of mountain.

Sunday, April 4

Working on collections and preparing for a start up Bellenden Ker early in the morning. Weather permitting (heavy showers off and on all today), George and I will make the trip with young Kerns as guide. Van will attend to trapping at foot of mountain. Geoff not yet in good enough physical shape for hard travel.

Monday, April 5 - Wednesday, April 7

Bill Kerns Jr. and his friend, Swen Nielsen, turned up bright and early and we left camp at 7:35 A.M. A clear morning and for the first time since we have been camped at the foot of the mountain we saw one of the main peaks - the South Peak - exposed through the white clouds hanging over the summit ridge.

Our packs were heavy. We had nothing with which to weigh them, but estimated their weight at about 30 lbs. Besides bread, canned meats, tea, sugar and butter, we each carried some collecting gear, one blanket and a change of clothing. David Abercrombie would not have approved of our packs, though we were rather proud of them. We spent a good part of Sunday afternoon fashining them from "Sugar Mixture" fertilizer sacks found in the barracks.

There was nothing fancy about our guides or their equipment either. Both wore shorts and shirt. Bill had no hat, Swen no shoes. Bill carried his things in an old army pack, with ground sheet slung below it and held steady at his waist by a web belt. Swen had a 70 lb. sugar bag for a pack.

Following grassy headlands of the canefields, and going through six wire gates, we reached the edge of the rainforest and the foot of the mountain in about 15 minutes, wet to above the knees by the grass.

The first 700 feet was hard going. Lawyer canes, and especially a climbing bamboo with hard green stems about an inch through, entangled open parts of the forest. Their sprawling stems, lying on or near the ground, made footing bad, and when out they came in sharp contact with shins and snagged our packs.

After passing King-fern Gully, at 800 feet, we had settled down under our packs and got our second wind. The sky clouded over, the air got cooler, and we began to feel that we would make it. We traveled very slowly, resting about 5 or 10 minutes after every half hour of climbing. It seemed our guides rather expected us to crack up and have to be helped with our loads, as had Chauvel of M C Z, and other scientific men before us.

At 11 o'clock we stopped to boil the billy and eat lunch at one of the gully heads of Junction Creek (1950 ft), the second water on the track. Leeches were particularly bad here. Swen's bare feet were a bloody mess by this time. Mist hung in the treetops, and as we shouldered our packs to go on at 12:20, rain began to fall.

From the Dinner Camp a very steep lift up a rocky slope, done gorilla fashion, with hands as well as feet, we came to the top of the main southern spur of the mountain at 3100 ft. (1:10 P.M.). Another 50 minutes of relatively easy travel, up and down along the narrow crest of the spur, brought us to Tick Camp at 2 o'clock (average of three aneroid readings - 3050 ft.).

Here we found in the rainforest, on the edge of the precipitous eastern slop of the main southern spur, a simple palm-leaf shelter which had been built by Bill and Swen when they were on the mountain during Easter. A leaky lean-to about 9 ft. wide, with no walls, and a few still green palm leaves placed on the ground for a floor. Small pools in the coarse granite sane of a gully head, about 60 feet down the side of the spur on the east side, provided the only permanent water on the trail above our dinner camp. The gully crowed with Orania palms and treeferns, growing over an herbaceous undergrowth of robust, sword-leaved Helmholtzia.

We stacked our packs under the leaky lean-to and in pelting rain Bill and Swen went after more palm leaves to enlarge and improve the shelter, while I brought water and started to light a fire. The boys had left a stick of green "ghittoe" hanging above the ground in the shelter. Ghittoe, green or dry, is supposed to burn under any conditions. This would not, nor would dry wood the boys brought in. We split it into slivers thin as a match, stacked the slivers carefully above the wet ground on flat-split billets, and still it would not burn. Wax matches were tried for kindling (my wooden matches, carried in an oiled silk tobacco pouch, were the only matches that would strike). Paper from my plant presses took up moisture so rapidly that the paper itself would not burn, let alone set fire to the wood. Rain kept pouring down, streaming through the roof, and oozing up through the ground. Our hands shook so with cold that it was hard to strike a match, or to arrange the delicate slivers of wood we were using, under the drip-proof shelter of Swen's wide felt hat. Finally, by use of butter, and a bit of waxed paper George had in his pack, we got a fire going and the billy on by 4:30. And did that fire smoke! A pungent, blinding smoke that drove us out into the rain to wipe our eyes and cough and puke.

While the billy boiled, the boys started a big fire of dead logs under a skillion extension of the shelter, as a fire inside the shelter, big enough to keep us warm in the night, would soon have shrivelled the palm leaf roof with its heat. About 8:30, when the rain slacked off a bit, we did the best we could about making beds, changed into our dry clothes, and turned in. Lightweight plastic-coated nylon raincoats were a boon to George and me. Worn over our wet clothing, they kept the wind off us until we went to bed. Worn over our dry clothing while we slept, they retained our body heat and saved us from being soaked by water which dripped through the roof onto our blankets. With occasional attention through the night the logs burned well, and we all had a good sleep.

Next morning about 8 o'clock we set out in steady light rain to climb the peak. It was steep going. Leeches were troublesom, but footing good, and we reached the 5000 foot summit of the South Peak at 10:55. The rainforest had changed gradually in composition as we ascended the mountain, but not greatly in general appearance. At about 100 ft. below the summit the trees began to diminish rapidly in height. They grew closer and closer together, woody undergrowth became abundant, and I noticed first trees of the remarkable dracaena-like heath, Dracophyllum Sayeri, then one or two examples of the flattish umbrella-topped Leptospermum mooroonooran - trees endemic to this mountain top. The limited, narrow-ridge summit carried a very densely packed, rigid low forest of elfin-wood

type, fairly heavily mossed, in which the biggest trees were the gnarled, sprawling leptospermums, about 15 to 18 ft. high. In a small clearing, a few yards across, Bill took out from under a rock a bottle in which were the names of previous parties which had climbed the mountain. On his Easter trip Bill had found the metal screw top of the bottle rusted through. So this time he had a new and bigger bottle into which the records were transferred, without examination. The rain kept on, our hands were wet, and we did not wish to risk damage to the records, said to date back to Meston's first ascent of the peak in 1889.

We were an hour and 20 minutes on the top. We could not see more than 100 yds. for mist and rain, and we were all too wet and cold for a longer stay. With Bill's help, in climbing, I collected about 35 spp. of plants, including a few mosses and hepatics. George collected a few small insects, and some of the big salmon-pink slugs which were conspicuous on leaves of the trees. I failed to find Rhododendron Lochae, Australia's one species of the genus, which was discovered here by Meston's party. The species is conspicuous in flower, and it would not be surprising if it has been exterminated in its type locality by visiting botanists or others.

The second night on Tick Camp we were more comfortable. We had more leaves on the roof and more on the ground, and there was not so much rain. Only three drips disturbed me - one beside my head, one on my middle, and one on my feet. Left Tick Camp on the descent at 8 am on the 7th and reached camp below the mountain at 12:15.

Collecting was sadly limited by constant rain and mist. We could see only a few yards most of the time. Most of the flowering plants collected on the slopes and on the summit were in fruit. A few plants were flowering on the slopes; only one - the Dracophyllum - on the summit. A number of spp. on the summit had neither flowers nor fruits. Indications point to the spring months being the best for collecting plants on the summit.

One of my side interests in the mountain was the collection of seeds of a native mangosteen, Garcinia Mestoni, endemic there, and supposed to fruit or ripen fruit at this time of year. David Fairchild wants them for planting in connection with experiments being carried out in Florida and Central America. Only one so far sterile tree survives in the Americas from a batch of seed Fairchild received through C. T. White some years ago; and if this tree does flower, it cannot set fruits, for Garcinia is dioecious. I found a mangosteen, possibly Mestoni, common as a substage tree in the forests of Bellenden-Ker from about 2000 to 4000 feet. But it was in flower, and I found only two malformed, probably off-season, fruits with seeds which were not worth collecting. The fruits were pale yellow.

Thursday, April 8:

The four of us returned to Cairns on Woodward's utility truck. Our week at Bellenden-Ker was quite profitable for limited collecting, yielding 65 mammals, a fair lot of reptiles and insects, and 90 numbers of plants.

George and I both have ankles swollen from leech bites, and both of us feel somewhat stiff after our exertions on Bellenden-Ker.

Friday, April 9

The strike ended while George and I were on the mountain. This morning the Time steamed in from Townsville and began unloading. Have arranged to get immediate delivery of our cargo when it leaves the ship's slings. Work went on to 10:30 this

evening without uncovering our crates. Three small vessels - Cora, Yalata, and Lochiel - are scheduled to leave for Thursday Island between Tuesday and Thursday of next week. I have reserved cargo space on all of them (if we miss one we ought to be able to get the next), and I have bookings on the weekly planes leaving for T.I. next Wednesday and the Wednesday after.

Had Mr. & Mrs. Stephens to dinner, and later, with them, visited a timber uses exhibition organized and privately financed by a voluble, aggressive enthusiast named Harry C. Whibley. Whibley knows timbers and their uses and has set out to stir in North Queenslanders an appreciation of the woods of their forests, and to campaign for better, less wasteful commercial utilization of the timbers. He is backed to some extent by the Harbor Board and the City Council, but the Chamber of Commerce and the timber interests are against him. During the war, Whibley was Timber Controller for the North, and made enemies among the sawmillers.

Saturday, April 10

Unloading of the Time continued until noon, but our cargo has not been sighted yet. Busy on specimens. Having some trouble with my plant material through shortage of papers for drying.

Sunday, April 11

Spent most of the day cataloging my plants from Mt. Bellenden-Ker. George out with George Brooks in afternoon and evening, bay-hunting on Freshwater Ck., near the inlet for the town water supply, and got two specimens. Van to Green Island to see his first coral reef. Geoff and I to Dupain's for cocktails.

Had an interesting visitor as I worked on my plants in the museum this morning. Lew Arnold, an alert man of nearly 80, retired Firest Ranger, now employed by some logging firm as advisor. Arnold, like Whibley, is most critical of logging methods, and dirty politics in the northern timber industry. More than 50% of timber felled in the forests is wasted, and never comes to the sawmills. On the milling side, one company, through political influence, has the whole veneering industry cornered; they cannot nearly fill the demand with their plant, but they see to it that no one else erects a plant and they have succeeded in stopping the export of cabinet-wood stumps to the veneer mills of Britain and the U.S.

Arnold has some original ideas. One is that the wood of forest lianas varies according to the species of tree the liana climbs on. One species of vine will have, variously, wood resembling cedar, rosewood, etc., according to the kind of tree on which it raises itself from the ground. A story in which he admitted there was a catch, was one of dancing trees. On Frenchman's Ck., south of Cairns, is an area of quaking ground on which palms and trees about 30 ft. high can be made to sway and lean in unison.

Monday, April 12

Got off a second sending of 41 soil samples to Chas. Pfizer, and a package of 5 sargassums to Dr. Parr. Mammals and plants from Bellenden-Ker drying well. Attention to many details concerned with our move north.

But our cargo has yet to come off the Time. We are going to be hard put to get it reorganized and shipped on one of the small vessels leaving within the next three days. It is about time our luch changed.

Tuesday, April 13:

By 9:30 we had our 16 crates of cargo from the Time, and by 9:30 this evening we stopped work with the satisfaction of seeing the end of cargo reorganization in sight. Thanks to Louis Ferri and his crew at the Museum, everything but a container of arsenic arrived in perfect condition. Some of the crate timbers were broken (knotty pieces). The arsenic got loose through a lid coming off in a box.

I omitted to record in my notes of Saturday that Jack Gordon, famed gold prospector and bushman of the Peninsula, is in town for eye treatment and came to see us. Very eager to help with information and advice. Knows the Iron Range area better than any other man. Made the first strike of gold there in 1934. Reputed to be quite well off as a result of his prospecting, and says this year will be his last on the Peninsula. On his prospecting trips he travels alone on foot, with a 22 rifle, small tent fly, pick, shovel, dish, and very little else. Lives on the country and travels far, with only a dog for companion. Has just returned from a six weeks' trip into the "turkey bush" country. Says little about his own affairs, and nothing in disfavor of other people. Evidently a man of two personalities. A hermit in the bush, and a gregarious, companionable man in town. Speaks well and is well informed. When his eyes are fixed, he will fly back to Iron Range and set out on another long journey in search of his bonanza.

Wednesday, April 14:

Cargo has been reorganized and is ready for loading on the Lochiel in the morning. Only my botanical supplies were organized on a regional-use basis in New York. Mammal supplies have had to be sorted and allotted to the various working localities. This has reduced bulk to be transported to the Tip, but for a party our size we still have too much.

Made various arrangements by telephone talks with Thursday Island. Thought it might be necessary for me to fly to T.I., with the certainty of arriving at Red Island Point a day or two after the rest of the party, but have been able to arrange everything by phone. B.P. of T.I. will attend to some details. Percy Jensen, Protector of Islanders, will have our three boys waiting at RIP for our arrival.

By special arrangement, the Lochiel will land us at RIP instead of going first to Thursday Island. Accommodations will be cramped for us as passengers, if the weather should happen to be rainy, but we should be at our destination Tuesday morning. George is gloomy about the boat trip, the others look upon it as promising a unique experience - a small boat passage inside the Great Barrier Reef. With only one plane a week now going to T.I. (on Wednesdays), and the certainty of at least one day between arrival by plane at T.I. and being able to get across to RIP, the party would be divided and disorganized should any of us fly north. The Lochiel is a staunch ship with a good record on the coast.

Had the Stephens and the Brooks to dinner at the hotel, and later we went to Stephens house to see color movies he has made on field trips in the north. The kodachrome rather poor for the most part - mostly over-exposed.

Thursday, April 15

Saw our cargo loaded on the Lochiel during the afternoon, went on board about 11 P.M., and at 12:20 we cast off from the wharf and headed for the long line of beacon lights marking the entrance to Cairns harbor. We are comfortably housed in the forecastle, where there are five good bunks, complete with clean white sheets and pillow cases, leaving one bunk and a big locker for storage of our personal boxes and gear. Smith, owner-skipper of the boat, promised us the best the ship could afford, and we have it in accommodations. The forecastle shows signs of a recent fairly thorough cleaning, but crawls with young cockroaches nevertheless.

The holds full, and we are carrying so much deck cargo in the shape of salt for Cooktown, and fresh fruit and vegetables for Thursday Island, that there is not much room to move about.

Smith is not on the ship this trip. He is on board the pearling schooner "Darnley", about to leave Cairns to salvage the wrecked pearler "Darwin", which ran on a reef north of Cooktown when we were on Bellenden-Ker. In charge as skipper-engineer is Bill Wallace, a blonde young American from Portland, Oregon, who was working in Tucson when we were there in 1940, knew Rogers and Barrinka, and later worked for Consolidated. As mate we have an Englishman, a qualified navigator, who came aboard in coat and tie, very drunk, and was put out of the wheelhouse by the skipper. As cook we have a harum-scarum, tattooed young Canadian who was barman in the T.I. Bloodhouse when I stayed there. The one native in the crew, Koko, a Torres Strait Islander, came on board in tipsy condition, offering everone drinks from a bottle of "Plantation" rum.

Finalizing everything in Cairns in three days was strenuous going for all of us. We have more than ample equipment and are well supplied with stores, although items such as onions and dried fruits are as yet unobtainable in Cairns owing to the recent strike.

It is good to be on the move. We are nearly 5 weeks behind schedule and the dry season will be well advanced by the time we get through with our planned work.

Friday, April 16

Terry's clatter and chatter in the galley woke me about sunrise, when we were off Mossman and on a course set to take us close to Snapper Island. The cool blue, cloud-capped mass of the Mt. Spurgeon - Mt. Armit complex, rising to over 4000 ft., looked most impressive, and to me a most inviting area to explore. Mt. Finnegan, passed later in the morning, had its head hidden in the same stratum of white cumulus. This mountain, Thornton Peak, and Mt. Spurgeon, are the dominating peaks of somewhat separated mountain areas in the rain-forested rangy country between Cairns and Cooktown. Archer Point marks approximately the northern limit of the continuous rain-forest below Cooktown.

Terry is living up to his reputation as a "champion ear basher" (i.e. talker), but he is feeding us like fighting cocks and his lusty servings are a change from the rather too genteel helpings of Hides Hotel. Great plates of ham and eggs, garnished with sliced tomatoes for breakfast. Baked ham, mashed potatoes, cucumber and tomato salad, and fruit salad of pineapples, oranges and papayas for lunch. Fried fish, fresh from the towline, and apple pie for dinner. All well cooked and attractively served. As a special treat at dinner, we had small bowls of _____, a raw fish dish popular with the Thursday Id. pearlers and said to be Japanese in origin. The fish is sliced thin, stepped in vinegar for some hours, and is eaten with fresh sliced onions.

About 6 P.M. we reached Cooktown and tied up to unload salt and ice. Our arrival was honored by one of the three hotels opening a "nine" (gallon steel container) of beer. This was the undoing of our motley crew. Returning to the ship at 10 o'clock from an evening with Dr. and Mrs. Kestevan at the hospital, we found the deck littered with a wild jumble of smashed cases of fruit and eggs, and the hands wrestling drunkenly with heavy sacks of salt. It was 11:30 before we got settled, with only the skipper and a deckhand, Bluey, sober. The Englishman and another crew member were left behind. The Englishman having a master's ticket for small vessels, was carried only to satisfy the navigation laws, and was quite useless as far as duties were concerned.

Kestevan presented George with two bats in pickle (one a topotype of a very rare Scoteinus. We have undertaken to send him, if possible, crocodile and green turtle material for his work in comparative embryology.

Inspected the 70 ft. trochus-shelling vessel of Rossow and his fat lazy son, and saw a collection of shells they are getting together from the Barrier Reef waters. Sixteen Lockhart River boys employed on the boat. They use dinghies from which they dive for the trochus, bare-skinned, in 4 to 5 fathoms of water. Boys said to be excellent divers and easy to manage. Shell $2\frac{1}{2}$ to 5 inches diameter is taken and sorted into 3 grades by size and quality. Best grade, $2\frac{1}{2}$ to $3\frac{1}{2}$ inch diameter, now bringing 72/-/- per ton. Business highly profitable.

Sat., April 17

At dawn we were coming up on Cape Flattery (apparently red sandstone, much contorted (photos)), and at 9 o'clock we were off Point Lookout, another bold cape of reddish sedimentary rock jutting out from an extensive area of sand dunes extending from south of Cape Bedford (ca. 15° 20'S) to about 14° 48' S. The sand color of the dunes, shown in numerous blow-outs in a generally vegetated surface, is white. The dunes carry low scrubby forest and apparently also shrubby growths. Had some information on the dune area from the missionary Swartz on my February visit to Cooktown. He advised the McIver River is the best place for a camp to work the dunes. Good water in a lagoon near an old coconut plantation planted by the Mission. Approach by sea. Road from Cooktown no longer passable (?).

At 4:30 P.M. dropped anchor off the west side of Switzer Reef, close beside the stranded "Darwin". We had carried a large dinghy from Cooktown for use in the salvage operations.

The Darwin lying high on the rough coral rock surface of the reef, with barely a foot of water around her at low tide. She had been stripped of everything moveable. The skipper having some work to do on the engine of the Lochiel, changing oil strainers, the four of us went ashore to explore the reef. The tide, then beginning to make, covered the reef to a depth of about a foot, except for one slightly higher spot of small area where various seabirds were resting.

Switzer is a dead reef, its original surface covered with coral debris and ooze, and supporting a scattering of juvenile giant clams up to nine inches in diameter, a few living brain corals of brownish color, a few drab brownish anemones, bright blue starfish, occasional black sea slugs, etc., more or less hidden by a slimy, pale green alga rooting on the bootom and spreading over the surface of the water at low water. The Tates and Van picked up various trophies and we all made photos.

The Darnley, with the salvage party on board, arrived and anchored beside us about dark and Smith came on board to see us. Up anchor and away about 7 o'clock.

Sunday, April 18

Kept going all night but for a brief stoppage to fix a water pump and at sunrise the Flinders Group of islands was well astern and heights of the Main Dividing Range showed far to the west across Princess Charlotte Bay. Farther north on the mainland the pale blue bulk of the McIlwraith Range was topped with white cloud which soon melted away when the sun gained strength.

This slow voyage up the coast gives one a good idea of the great size of the Cape York Peninsula. It also brings to one's attention the great amount of work which remains to be done in mapping parts of the area. The McIlwraith Range is a

Sunday, April 18 (Cont'd)

case in point. On the latest map we have, a sheet of the AAF aeronautical chart published in 1945, it is shown merely as a crooked caterpiller with not a single altitude given. Although a conspicuous mass of mountains from the sea, the range is not shown at all on the marine charts. But on all maps the much smaller and lower Macrossan Range figures prominently, with altitudes no doubt copied from the marine charts based on early surveys of the coast dating perhaps as far back as Captain Cook's.

From our course, about 25 miles from the McIlwraith Range, the range looks dry and the areas of rainforest which I know from air observations to exist are indistinguishable from cloud shadows. From the sea the range looks 2 to 3 thousand feet high on its most elevated parts. It is this elevation, and increased rainfall, which brings in the rainforest type of vegetation, in an area quite isolated from the great rainforests of the Cairns-Cooktown area.

Made a panoramic series of photos of the McIlwraith Range and the Macrossan Range from a position half mile west of Hannah Island, taking in a sweep of from about 230 to 340 degrees. The Macrossan Range, running closely parallel with the sea for some 50 miles, rising in places to somewhat over 1600 ft., and breached in two places by the Nesbit River and Hayes Ck., carries much rainforest on its seaward slope. But the rainforest is generally on the middle to upper slopes and crest, the lower slopes and narrow coastal plain being occupied by savanna-forest of brownish appearance. Pale green areas show where the rainforests have been destroyed by fire, the most striking of the pale green grass areas being on spur ridges, on several of which fires have burned a narrow strip, looking like a road clearing, and reaching clear to the top of the range between walls of dark rainforest.

With the southeast wind freshening toward evening and helping us do a good 7 knots with sails hoisted to help the engine, we passed Cape Direction at 8 P.M. The sails have been rigged all day, but until near evening were of little use but to give some shade on deck.

Monday, April 19

At 6:30 A.M. we were passing Sunday Island, northernmost of a group of small to largish elevated islands (of red sandstone?) off Cape Grenville. White sandhills showing on the cape and northwards along the shore of Shelburne Bay. In varying depth, and perhaps an occasional break where sound country extends to the shore from inland, these dunes extend along the cost from Cape Grenville to near the mouth of the Escape River.

As we neared Bird Islands, the engine conked out again - it has been doing that every few hours since we left Cairns. This time it was the injector system - clogged with rubbish from the fuel oil and causing the engine to overheat. The sails took us to Hannibal Island where we dropped anchor at 2:30, and having several hours to spare (we must have daylight to get into RIP and cannot get there before nightfall), we all went ashore. The crew to try for fish and crayfish with spears, and to look for turtle eggs, the rest of us to explore the island and its reefs and beaches.

We were on the westernmost of the two Hannibal Islands (I believe it is called Busby Id. on the chart). Both are on the edge of a somewhat circular reef, bare at low tide. Our island was raised perhaps 10 ft. above high water mark and was of coral sand resting on a base of flat bedded sedimentary rock which outcropped extensively around the edges of the island. The rock apparently a fine-grained marine conglomerate of coral sand. Above the tides the island is covered with brushy forest containing large wongai trees, several Ficus spp. and a surprising assortment of

Monday, April 19 - (Cont'd)

woody plants of the forest edged with Casuarina and other beach trees and shrubs and trailers. A reef on the north side of the island, mostly under up to a foot of water at low tide, carried a rich flora of alga and several species of brain coral. A steep sand beach on the west side of the island was rich in wave-cast small shells.

Fish-spearing yielded only one small shark. Terry, the cook, and Koko, the islander, had no success in diving with face-piece and spear for crayfish. Results were better for turtle eggs. Two nests were found just above high water mark in sand, and the sand scratched away to expose the eggs, buried about 6 to 15 inches below the surface. About 60 eggs were got from the first next, 110 by actual count from the second. According to Koko, both nests were of the hawksbill turtle, but Terry held the species was the green turtle. We are promised a turtle-egg omelette for breakfast.

Left Hannibal Island about 6:30 with the intention of running all night to reach Red Island Point at daylight. Sky overcast and black, promising bad weather, and the boat rolling and tossing in a sea which has risen since nightfall.

Tuesday April 20.

Instead of arriving at RIP at daylight, we got there at 9.30. At grey dawn we were passing Eborac Light, off the tip of Cape York proper and the northernmost point of Australia. About 8 oclock we passed Possession Island, where Captain Cook hoisted his flag and proclaimed British possession of this country. Cook landed on a sandy beach and raised the flag on a little rocky promontory to the west of it, on a spot now marked with a stone or concrete monument. According to reports Cook raised his flag on top of a gold-bearing reef. Gold has been mined off and on in the vicinity for many years. From the sea we could see old workings only a few yards from the monument. The mine tunnels are said to be inhabited by thousands of bats. Tom Holland told us about the bats. He and some others visited the mine a week or so ago.

Terry the cook came good with his promise of a turtle egg omelette for breakfast - rich yellow, mealy in texture, flavored well with onions, and very good eating. Later, George examined some of the eggs and selected three enbryos, with nicely developed eyes, for Kesteven.

At RIP, Joe McLaughlin, whom I engaged as cook two months ago, was on the wharf to meet us. He had been camping in the wharf shed for some weeks. Soon after we arrived, two blackboys rode in from Cowal Creek Mission, some 8 or 10 miles to the south, and an hour or so later the third of our native helpers made an appearance. All are mainlanders. Robert Massey, who will be my boys, is a mission-educated lad of twenty odd years, and a councillor of the mission village. Bob McDonnell, who will help Van, is an intelligent, genial chap of 35 or 40. George Moreton, George's helper, is a good deal older, pretty much of a "binghi" or bush native, but anything but guileless, and reputed to be a first class hunter. He brought along three spears and a woomera.

The cargo was unloaded in good time, and sorted into first and second load stacks for truck transport to Lockerbie. We had eaten lunch before old Dick Holland and his young son Dick arrived with a 4-wheel drive blitz buggy and trailer. He had thought the regular road impassable after recent heavy rains, and had made a long detour by an all-weather road which does not appear on the military maps. Our gear, weighing perhaps 2½ tons, could have been carried on truck and trailer, but as the day was getting on, we decided to load the truck alone, and try the direct road (11 miles) rather than follow the 18-mile detour. The sand was deep in two of the creek crossings, and some tea-tree flats were soft, but capably driven by Dick senior, the truck went through with no trouble and in less than an hour we were at Lockerbie.

Nothing could be done until Mrs. Holland had provided tea, with fresh cooked bread and rolls. Selected a camp site under a group of shady mango trees, and by sundown we poled in, ground cleared, and two big flys rigged for shelter. Everything went very smoothly for a first camp.

Wednesday April 21

Holland had our second lot of cargo in camp, and gathered a load of firewood for the cook, before noon. On a final checking, we find we are short of an 8x10 tent and a sack of tow, presumably carried off in the hold of the Lochiel.

By about 4 pm camp was comfortably rigged and equipment set out ready for full scale collecting tomorrow. After some tuition, the two mammal boys were given five rat traps each and told to set them out for their first trial at trapping.

For bringing us from RIP, carting firewood, etc., Holland has asked £7/10/-; which is very reasonable. He has given us a 12 x 12 shack for cookhouse, and built a skillion onto it for a dining place; installed a stove for the cook; laid on water from the spring; made us a shower room, and installed a pit latrine. I expected nothing quite so hospitable when I decided to base at Lockerbie.

Joe the cook gets £9 per week for full services every day, plus food. Wages in Australia are much higher than pre-war, and the recent application of the 40 hour week to all jobs has been a boon to employees such as cooks. Work on Saturdays and Sundays calls for payment of time and a half. Basic weekly pay for a bush cook in this area (No. 10 zone) is £7/10/-, plus fourpence a day bush allowance!

Thursday April 22

My first day in the field on Cape York yielded me 137 sheets of 21 app. for about 2½ hours actually spent in the field. Collected on a wet teatree (Melaleuca) flat about 3/4 mile SW of camp. Grey podsolized sand generally two or three inches under peat-stained water, with here and there a raised bit of ground a few feet across and an inch or two above water. Ground cover generally of sedges, of which I gathered 8 species. Restionaceae No. 18352, with very hairy rudimentary leaves on its young stems only, was abundant in parts, as was a small Eriocaulon (18356). Commonest of a thin stand of trees were Melaleuca Leucadendron vel aff. 18350 (15-20 m. tall), M. symphyocarpa (18351) with rough bark and drooping branches, and Banksia integrifolia (18366), up to 6 or 7 m high.

My boy Robert has made a good start. Very observant and quick to learn, though not noticeably enthusiastic about such things as sedges. Sedges are just undurra (grasses) to Robert. He knows the native names for practically all the savanna-forest trees, and many smaller plants. Is modest about his knowledge, saying that the old men of the tribe know more than he. His tribe has been brought from the McDonnell country to settle at the Cowal Creek Mission. According to Holland, the last of the Cape York (Somerset) blacks died 20 to 30 years ago.

Between them the two mammal boys trapped one Melomys last night. Out jacking with young Dick Holland, Van shot a spotted cuscus and anothe Melomys. This evening the mammal dept. has out 75 rat traps and a few steels.

Friday April 23

Most of my morning spent on a reconnaissance trip with Dick senior. Visited the sawmill, property of Tom Holland, about 3 miles from Lockerbie along the Somerset track, in a small savanna-forest pocket within the "Big Scrub." Dick had to go there to pick up his daughter, Pearl, who has been minding the two small children of Tom, whose wife is at T.I., having another baby. Tom has cut a clearing of about 3 acres in the rain forest and built a house in it. Around the edges of this clearing one gets the most impressive view of the rain forest. Big trees and numerous slender palms, both feather leaved and fanleaved. We followed the old Somerset track for about 1/2 mile into the rain-forest; the route running close to a branch of the Laradenya Creek most of the way. The rain forest carries a rather scattered stand of fairly big trees, many trees of second magnitude, and a rather open woody undergrowth. Herbaceous plants practically absent. Few epiphytes seen. Very few lianas. Only a tinge of green moss on some of the trees, and on sharp blocks of lateritic irontstone outcropping here and there. A slender

Pandanus, about 30 ft. high, with long, branched stilt roots, was plentiful close to the creek, in association with groups of a tall palm, fully 60 ft. tall, which looked like Gulubia. In all, I saw in the rain forest near the sawmill, 7 palm species: 3 with feather leaves, 2 with fan leaves, 1 Caryota, and 1 Calamus. All the palms were either sterile or with very young fruits. The Pandanus had dropped its fruits. Very few trees in flower or fruit. Apparently the fruiting season has ended recently. The rain forest does not look promising for collecting at this time of year.

A thriving day for mammals. All the trappers but Van - who got nothing from his line, set late in the afternoon - had good catches. Total score 17 (Rattus leucopus and Melomys sp.), plus a wallaby (Macropus agilis) shot by Van.

Geoff did some long distance, but not very profitable, walking for insects. His most interesting take for the day was perhaps a reddish land crab, about 2½ in. in diameter, which had eaten about half the meat off a rat caught in one of George's traps.

No rain has fallen since we have been here. Rather high temperatures during the day are tempered by the southeast trade wind, which is slowed by the land to the east and reaches us as a gentle breeze. From about five in the evening to late at night, and again from daylight to around 8 o'clock, the air is soft and cool. In the early hours before dawn one needs at least one blanket for comfort. Last night I had to get into my sleeping bag.

Maximum temperature 31 C., Minimum 20. Thermometers set about 4 ft. above the ground on the shady trunk of a mango tree in front of my tent.

Saturday April 24

Sampled the rain-forests on the crest of the divide behind camp. The divide, separating the waters flowing east to the Pacific and west to the Gulf of Carpentaria, is flat-topped and about 200 feet high - 100 higher than camp. The forest is of a dry type, with no large trees, an abundance of small tree undergrowth, easy to get through, and practically nothing in the way of herbaceous undergrowth or epiphytes. Looking through the forest, one notices a vine here and there, but thin-stemmed species occur in abundance, and they held up every small tree my boy cut down. Reddish lateritic rock outcrops abundantly, and in places forms escarpments 3 or 4 feet high, on the slopes. On the crest of the divide is a deep reddish soil. On the Back Road, which I followed, a patch of several acres of greyish sandy soil carried a mixed grassy and woody vegetation, and Acacia sp. and other trees characteristic of rain-forest edges.

On first sight, the rain-forest appears to be in a resting period, with nothing flowering or fruiting, but careful examination shows a fair sprinkling of canopy trees and lesser species with inconspicuous flowers or fruits or both. The morning's take was 18 spp., 115 sets.

A slight, not unexpected, falling off in results from traps, but the catch included two specimens of a Rattus new to the collection, and last night, Van, hunting with young Dick, shot a very nice specimen of Dactylopsila. So far we have six spp. of mammals from this camp.

We are doing well for fresh meat. A couple of nights ago Holland went out with truck and rifle and brought home the cut-up carcass of one of his wild cattle. Yesterday a telegraph linesman from Cape York (name of Cupid) rode in with a pack horse load of fish, caught in a trap at the

telegraph station. This morning I shot a "scrub turkey" (one of the megapodes). A shameful exhibition of shooting. Went out with two rounds of No. 6 and two of buck in my pockets. A brace of turkeys flushed from the ground and lit on trees in the forest. I wounded the first and killed the second with sixes; let go the two rounds of buck at the wounded bird, and it flew away.

Sunday April 25:

Half expected to find George's blackboy Moreton gone this morning, but all three turned up to eat their usual hearty breakfast. Moreton approached George yesterday for Sunday off, and permission to go home to Cowal Creek, some 20 miles away. Said there was a law against work on Sunday. Came in to see me about it, but lost his nerve and stayed awhile watching me work on plants. We must work seven days a week, most weeks, and the boys will get extra pay for it.

A very good day for both mammals and plants. Fifteen rats in traps, including Uromys, new to the collection for this locality. Another Dactylopsila shot by Van last night, and this evening the boys swatted two horseshoe bats in their tent. These were the first bats taken or seen here. According to George's lists, a total of 16 mammals are known from the vague locality "Cape York." We have 8 species from this camp in 4 days.

My collecting was done between camp and Laradenya Creek, about 3/4 mile to the northwest. Most of my plants were from savanna-forest on sandy soil close to the creek. The creek itself is very narrowly fringed with gallery woods of rain-forest trees. The savanna-forest of the extensive sandy flats in the valley of the creek are characterized by bloodwood trees around 40 ft. tall, and contain an abundance of Tristania longivalvis, with rose-scented yellow flowers, Parinarium nonda, Acacia 18399, and one of the beefwoods (Grevillea sp.). The grasses are chiefly Heteropogon insignis and Pennisetm? 18368, their leafy parts forming a thick cover about shoulder high, and their flower spikes rising to about 7 or 8 feet. Treeless aand patches (all the soil is reddish), are occupied by slender, drooping Aristida 18419, with Eragrostis 18420, E. 18422, and Cyperaceae 18421 as frequent minor associates.

In the gallery woods, actually on the brink of the creek bank, I found a solitary example of a puzzling tree (18413) with the smooth grey, scrolled bark of a gum tree, small capsules like those of a Eucalyptus, and the leaf scent of a melaleuca. Have seen nothing like it before.

Mails today, brought from T.I. by a picnic party which visited a telegraph booster station near Cape York.

Maximum temp. 31, min. 24. Yesterday - 31 max., 21 min.

Monday April 26:

The best day yet for plants - 37 spp., 201 sets. Collected in savanna forest along the Somerset road to about 3/4 mile from camp, mostly on a hard lateritic ridge where many annuals grow with small "fire" grasses. No particularly striking plants. Grasses, sedges, and small legumes well represented.

My drying equipment is working splendidly, the 500 c.p. lamps providing enough heat to cope with the loss due to the constant blowing of the trade wind during the day and part of the night. My boy now knows the routine of tending lamps and other equipment.

Since our arrival here only a few spots of rain have fallen - at night. Some cloud accumulation every day. Every day the trade wind starts to blow when the sun gains strength, and as a rule dies down about sunset, but last night and the night before, when temperatures were higher than average, the wind kept up with some strength until well toward midnight. While generally the grass is very wet with dew in the morning, there was no dew on the mornings following the windy nights. Every day there is a noticeable decrease in the amount of water seeping out of the rain-forested hills and flowing down the grassy watercourses to the Laradenya. The seepage water is from the copious rains which fell all through March.

Mammal results fell to 12 from traps last night, and long jacking excursions by George and Van yielded nothing. But tonight the mammal department had a very nice windfall in the sahpe of a catch of 24 bats made by the crew of the Lochiel in the old mine shafts on Possession Id. Holland brought them from the carrier station on the telegraph line, where they had been left with our missing bag of tow and tent. 21 Miniopteris, 2 Taphyzous, and one of a genus which George cannot place (1 specimen of the same genus got on the Walter Hill Range near Millaa Millaa).

Apparently our boys are pleased with their jobs. This afternoon old Moreton approached me for jobs for three of his friends. My tent is close to the boys', and I sometimes overhear their talk. According to Moreton this evening, ours is "not proper work," which means it is not hard work such as they are accustomed to doing for white men.

Max. temp. 31. min. 23 C.

Tuesday April 27:

An uneventful day, the only noteworthy event being the shooting of a red-legged scrub wallaby by the blackboy Moreton. Nothing got by jacking last night.

My 32 plant numbers represent for the most part run of the mill savanna plants which have to be collected for a definitive collection. Collected as far as Horse Plain, about 3/4 mile to the north of camp. The "plain" merely a sandy patch in the savanna forest of the Laradenya Ck. valley, carrying few trees, many tall red termite nests, and a grass cover chiefly of the annual Aristida 18419. Most of my plants taken on the banks of a seasonal-flowing feeder of the Laradenya, where a curious Eriocaulon (18474) grew almost entirely submerged in running water, and purple Utricularia 18486 occurred on wet sandy ground.

Temp. Max 30, min. 20 C.

Wednesday April 28:

Examined a very interesting patch of "black teatree scrub" on the south side of Cody Creek, about 3 miles back along the middle road to RIP. A type of vegetation quite different from anything else in this area. The "teatrees" are a mixed lot of small-leaved Myrtaceae; the

"black" in the name probably alludes to the blackish-gray color of the bark of the trees. The soil is a sour sand, elevated a little above adjacent wet teatree flats. Trees up to ca. 30 ft. tall; the major dominant being Thryptomene oligandra. Undergrowth formed by two species of Australian heath (Epacridaceae) - both bushy big shrubs or small trees- growing in great abundance to a height of 6 - 12 feet but leaving open glades through which one can walk freely through the scrub. Wiry, tufted Restionaceae 18507, and a few stiff sedges, form what little ground cover there is apart from a couple of mosses which occur usually under the shade of the heaths. Several epiphytic orchids grow close to the ground; the most conspicuous being Dendrobium 18511 with a great showing of waxy purple-borwn, curly, sweet scented blooms. Other common epiphytes are climb ng, succulent dischidias (D. nummularia and D. Rafflesiana).

A wet teatree flat, beside the black teatree scrub, was remarkable for the number of species of bladderworts scattered through the sparse sedge and grass ground cover. Collected no less than five spp., and found a sixth which I decided to leave for another day. Collecting series of these very small plants uses up a lot of time. One of todays' bladderworts, U. 18517, was only 3 cm. high and its white flowers so minute that I had to stoop close to the ground to seethem. Also found 3 spp. of Drosera; two of them sterile, and one of the sterile species almost as tiny as the little white Utricularia.

My trip to Cody Creek was done by bicycle. My first ride on one of these machines for fully 30 years. The road was just two wheel tracks through grass over head high, with here and there a muddy watercourse or deep ruts where Holland's truck had sunk down in the wet season. With Robert, a good bike rider, following, I led my machine out of sight of camp before trying to ride it. Had numerous mishaps, but by good luck always managed to land with a foot on the ground. The worst trouble was the long grass, which whipped across my sweaty face and into my eyes, and I did not dare to raise a hand to ward it off. That was on the outward trip. On the home run I was getting the feel of the machine and no longer tried to handle it like a car or a horse.

Having no jeep, I bought three second hand bikes in Cairns for use in collecting. They should be very useful, for in all our collecting localities there are roads of a kind.

Thursday April 29:

The butcher's boat from T. I. was expected at RIP today with mails, and having letters to do, I took the day off to attend to correspondence and do odd jobs outstanding. Geoff went to RIP with Holland to meet the boat, but no boat arrived.

A tally of results of my first week here shows 187 numbers and 1094 sets collected, which is a nice start.

Last night George and Van went hunting in the vicinity of the sawmill with the two Dick Hollands. Someone got lost in the rain forest (who it was has been kept secret from those of us who stayed at home), most of the ammunition was used in blazing at a ghecko in a high tree, and no mammals were shot or seen. A fine big 48 lb. specimen of Macropus agilis jardinei shot by the boy Moreton this afternoon.

Friday April 30:

The event most recording is a hunt last night by the two Hollands, George and Van in the savanna forests some miles west of camp. They separated after driving out, old Dick and George walking home across country, for no results, and the others returning by truck and bringing 2 bandicoots, 1 wallaby, 5 spp. of frogs and a lizard or so. The bandicoots were Isoodon, probably different species, and the first of this group taken here.

Nothing remarkable in a good haul of plants from down the Laradenya Creek to about a mile or a little more from camp. The common Pandanus (18552) of the savanna forests was collected. Also Garuga floribunda (18551), which exudes a resin used by the blacks for cementing spear heads. Have started collecting sterile material of savanna trees which afe not in flower or fruit. The trees and the ground plants of the open country have different reproductive seasons: most of the former being sterile now (bloodwood has buds which should open in a few days) while nearly all of the latter are fertile.

Saturday May 1:

A very good morning in the field for plants yielded 186 sets of 31 numbers. Cycled down the Tuckanoo road to the crossing of the Laradenya, somewhat over 2 miles, and collected on moist to wet teatree flats, and in small islands of black teatree scrub, which front the creek to a depth of about 1/4 mile on the north side. Among many small herbs was a Centrolepis (18587), 2 Eriocaulon spp., and 2 spp. of bladderworts. I now have for this locality 9 or 10 spp. of Utricularia. Bailey, in his Catalogue, published in 1909, listed 16 spp. for the whole of Queensland.

A good day for Geoff was topped off by a night hunt which gave him a nice collection of spiders, got with the aid of a jacklamp.

A regular bust up with the boys this afternoon. Reason - weekend work. They don't like it. Further, they have been too well fed by the cook. Their hides are fairly shining. What more does a blackfellow want? His belly full, and a shady tree?

Our work must if possible go on seven days a week. At the end of last week the boys were told this by me and all three agreed to work Sundays for extra pay and take time off to visit their village when convenient for us. This afternoon Bob and Robert insisted on going home to Cowal Ck. Mission, and that was that. Old Moreton thought of quitting too but decided to stay, and departed for the mission, a couple of hours behind the others, carrying a letter to the head of the mission asking for more boys.

Was sorry to lose Robert, but evidently he and Bob had been scheming for several days, and during that time his work had deteriorated. Bob was leader in the disaffection; Robert followed his lead. About last Monday Bob developed a sore leg and was excused all duties that involved walking. Thursday he asked me if I would send him to hospital for treatment. Friday morning his leg was miraculously well, and in the evening he came to me to ask for the weekend off: his leg then being in good shape for the 17-mile walk to the mission. Realizing that we cannot expect them to keep constantly on the job, especially when in their home territory, I offered time off when we return from a trip planned for Newcastle Bay. But they were determined to go today, and they went.

Today I learned from Holland something of the history of our two former employees. Robert is well educated for an abo, and though young, he was made chairman of a council of natives which, until lately, ran the mission, or advised the man in charge. The councillor system did not work well, and was abolished. Am not clear whether this was before or after Robert earned himself the title of leader of the local "black socialists" by taking the floor at a village assembly and denouncing the rule of the white man.

Bob's specialty in the past has been stealing horses and cattle. He was leader of a band which, in the period of disorganization after the war, went after Holland's cattle with 303 rifles and motor trucks. The trucks, used to carry the beef home, were driven by natives employed by Government in moving out surplus military stores. The gang was broken up when Holland's sons, Tom and Stan, somewhere in the bush, came across Bob and some of his men with the cut-up carcases of three beasts in a truck, gave the boys a hiding, and confiscated truck and beef.

Sunday May 2:

Mail in from RIP late last night, by Tom Holland. Mack of the Qld. Museum advised by telegram that his man Vernon will be leaving Brisbane for Portland Roads on a John Burke boat sailing on the 16th. This means another alteration in John Burke's schedule, and a revision in our plans for work on the Tip. The boat mentioned by Mack should return southward from T.I. about May 28th, and it is the only boat now in sight to take us to Portland Roads about the time we want to move.

Work went on as usual. George has about 75 traps out on a new line cut through the rain forest for about a mile. Van has about an equal number scattered in several areas. Had an unexciting day, collecting common plants within half mile of camp along the Somerset Road - savanna spp. and some from rain-forest borders.

Monday May 3:

With Geoff for company, collected on the south side of Laradenya Ck., near the crossing of the Cape York road. Plants mostly from a sour tea-tree flat, and from a small billabong waterhole where a few plants of a very fragrant blue waterlily (Nymphaea 18615) were in flower. An iron-stone tableland of small size, rising rather sharply from near the creek, was already dry and yielded few plants. A nearly pure stand of bloodwood, about 50 ft. high, formed the savanna forest on the low tableland.

Geoff to the carrier station on the telegraph line to make phone calls to T.I. in the morning. Rode over in Tom Holland's jeep, carrying a bike for the return trip. The alteration in John Burke steamer services, and the fact that as far as we know this company's boats are the only ones left in the coastal trade, makes it necessary for us to make arrangements for our move down to Portland Roads well ahead of time.

Tuesday May 4:

Collected up the Somerset road to where it turns into the "Big Scrub", about 2 miles from camp. Got only 19 spp. including 4 mosses. One of the mosses (18644) remarkably like a grey species which grows about the base of cabbage palms in the hammocks of Florida. Collecting in the open country within practicable reach of camp has gone about as far as is possible. I still have to make a thorough examination of the rain forests.

Old Moreton arrived just before lunch, accompanied by a middle aged boy called Willie Somerset, and bearing a letter from J. Tamway, Government Supervisor of Cowal Creek Mission. In an excess of zeal, Tamway, a Badu (Torres Strait) islander, has thrown Robert and Bob into Jail for desertion! These natives, when in authority, are apt to be tough on their fellows. The boys are being held pending the arrival of the Protector. Another new boy, a young fellow, is due to arrive tomorrow.

Am not altogether struck on the boy Willie. Seems a bit dumb, but according to Dick Holland he was a cook on the mission for years, so I daresay he can hold his end up. For a start, he and Moreton made a yam gathering excursion of their trip from RIP, travelled along the beach, and took two days to get here.

Geoff got in about the middle of the afternoon in very sorry and sweaty condition. Made the trip to the telegraph station, about 8 miles, without repair kit (he has misplaced all the tools somewhere), and got a puncture soon after starting back. Wheeled the bike for miles, and the day was hot.

According to Asange, the T.I. agent for John Burke, no alteration has been made in boat sailing; which may or may not be correct. At any rate we have bookings on the next two Burke steamers out of T.I. The Lochiel has been taken off the Cairns run and made into a pearler (and is held up for want of a crew). The Yalata has not been heard of lately. Coastwise shipping is in one awful mess.

Tonight, George and Van are out jacking, in the dark of the moon. Old Moreton, in the boy's tent, which is all too close to mine, is consoling himself with a "sick corobboree." A dirge in bass which would go well with a bagpipe accompaniment. The old boy is losing a molar, and it has become infected and painful. The sound of a shot down on the flat means perhaps another Dactylopsila or Melomys to Van's score.

Wednesday May 5:

No field work other than picking up traps. Packing specimens and preparing for an early start for Newcastle Bay tomorrow.

Our second new boy has not appeared yet. But he will be able to follow our wheel tracks if he turns up while we are away. Cowal Creek Mission is short of store foods and the blacks are out living by hunting and yam digging.

In mammals we have 202 specimens for 13 days work at Lockerbie. These represent 14 species - possibly 15. Yesterday a spotted cat (Saturnellus) was bought from one of Stan Holland's boys at RIP. And last night Van, helped by young Dick Holland, shot one Pteropus gouldi, 3 Dacylopsila and 1 Melomys.

In plants I have 303 numbers, 1764 sheets.

Thursday May 6:

Our striking of camp was not a very snappy movement, but we had Holland's truck loaded and were on the road for Newcastle Bay by 7:45. Geoff and Van need more experience in setting up and moving camp, and in methods of packing gear. Left main supplies, and collections, in a big fly and two tents under the mango trees at Lockerbie.

The distance from Lockerbie to our camp on Naru Point, in Newcastle Bay is perhaps about 12 miles, but the cyclone of last January left many trees over the road, and it was about 1 o'clock when we arrived at our camp site. In the savanna forest most of the down timber could be dodged by detouring through the long grass. In the big Scrub, and in strips of rain forest elsewhere on the route, there was nothing for it but to clear the road, or cut a new one, with axes and machetes. With a driver more timid than Holland, or a truck less sturdy than his Canadian built army 4 x 4, we would have been tireder men this evening. We went over everything the truck could climb, knock down, or crush with its weight.

From the sawmill the road (Jardine's old Somerset to Lockerbie road) passed through the Big Scrub on top of the backbone of the Peninsula to a point about 8 miles from Somerset, where we came to the first of several savanna forest pockets surrounded by rain forest. About 3 miles from Somerset we left the fairly well defined old road in savanna-forest and struck south to connect with an old road cut through a strip of rain forest near Lake Borento (Bronto on the military map). Holland misjudged by about 1/2 mile. While walking east through the rain forest to find it he and I started up a small mob of wild cattle, and lying in the track, where we struck it, was a split bag with someone's lunch in it. There were horse tracks too. The corned beef fritters in the bag were fresh. The owner (Gibson of Roma Flat, according to Holland) had been there yesterday, hunting beef,

Paused only long enough to drink, and make a few photos, at Lake Boronto. A deep looking, roughly circular body of water ca. 1/4 mile across, open but for some sedgy growths here and there, and surrounded on three sides by low sandy ridges. No water fowl seen. From the lake almost to the coast we followed a narrow strip of sandy savanna forest, trending SE, with rain forest to the north and dune scrub to the south. Got stuck in a deep sandy gully about 1/4 mile from the beach; lifted the bogged hind wheel with lever and fulcrum. Then passed through a narrow strip of rain forest to emerge on a "belly point" covered with bluish short grass - Naru Point (Narau Point according to the army map makers).

Standing right out in the open on Naru Point was a little hut of galvanized iron, about 6 by 6, with a rusted stove in it, and beside it some poles on the ground which may have been part of a tent rig. The army had a searchlight position there during the war.

We rigged our camp in the shelter of sprawling low windbeaten trees on the sand dunes immediately south of the point. The kitchen fly and the mammal dept. on one dune, my establishment on the next dune, and the boys tent on the third. Little streams running between the dunes, and edged with pandans, provide water somewhat peat stained but good to drink. Lunch over, Holland the two boys went out for tent poles while the rest of us carried the gear to the tent sites, and by dark we had camp in order.

<u>Monday May 10</u>:
Have been too busy with plants to write notes since the day of our arrival at Newcastle Bay. Until this evening I have had left over collections to prepare after the evening meal. Today was rainy, so I collected in a wet hollow behind the camp dunes and was through with preparations by 5 o'clock.

The camp has been very profitable for plants and should continue so for several more days. The plan is to collect here for seven full days, then return to Lockerbie. The area of the sand dune is greatly exaggerated on the military map. It is probably too limited to carry distinctive mammals, although a ground inhabiting Melomys, different from any taken elsewhere, has been caught in a trap a few yards from camp. This, and a Uromys, were taken by Van from about 20 traps set out hurriedly the first night. Since then, the three trappers have caught but 3 specimens between them. The second and third nights yielded nothing at all from about 150 traps. This is hard to account for. Traps have been set in adjacent rain forest and savanna forest as well as the dune area. Not even a wallaby has been shot. The mammal collection is an amazing one nevertheless. Eleven specimens in four days and nights, and they represent 10 species: 2 Melomys, 1 Uromys, 1 Dactylopsila, 1 Petaurus, 1 Rattus, 2 bats netted by Van at a rock fissure on the point, 1 Acrobates, and 1 Isoodon. The Acrobates is a particularly good thing. It extends the known range of the genus a great jump to the north - from the Atherton Tableland.

The taking of the Acrobates is quite a story. Van and George, out night hunting, found a flowering bloodwood tree from which they shot the Dactylopsila and Petaurus. There were other Petaurus in the tree, and in trying to get them Van saw the quick movement of something much smaller - something with a pale belly, and fired a shot at it. Thought he had a kill, but could find nothing by lamplight in the grass and bushes under the tree. Next morning he was back at the tree bright and early. All he found was a small python, coiled in thick cover, which he killed, brought to camp and coiled in lifelike position on Geoff's table, for a joke. It was in the belly of the snake that the Acrobates was later found, and with it a young bandicoot.

Day and night since we have been here a strong southeaster has blown with no let-up. It lashes the low trees of the dune scrubs so that I can't tell whether or not they hold flowers or fruits for me, and on the open grasslands and in the shrubberies the movement is just as bad. For a day or two it blew sand into our food and sifted into tents and beds. Now the surface sand is wet with rain. A shower or two fell the afternoon we set up camp. Dry season showers, frog showers or gammon showers. There has been no pretense about the showers for the past two days. In that time we have not seen the sun. The showers come closer together, and progressively heavier. We all got more or less wet today on field work. Wet clothing, washed and unwashed, hangs wherever there is free space. Last night was too wet for jacking. George and Van came in a few minutes ago, wet. They had been back to the Acrobates tree. Van's headlight went suddenly wrong and his flashlamp soon burned dim. George could not see throug his rain-wet glasses, so they called it a night.

Tuesday May 11:

Collected inland about a mile to near Lake Bronto - sandy savanna - forest with big bloodwood and teatrees, small patches of black teatree scrub. Topography and soil suggest an ancient sand dune area, in which Lake Bronto occupies a basin without surface outlet.

An interesting plant was a species of Santalum I have not seen before. Growing socially in the sandy savanna-forest. Small, rough barked tree about 15-18 ft. high. Wood with high oil content but aromatic only when dry. My boy Willie informed me that before the war this same species was cut for export, and that it is common on the Jardine River. A

history of sandalwood getting in the Pacific would make a lurid story. Much blood has been shed over it. Blackbirding, sandalwooding, and pearling attracted men of the same ilk, in the days before the law.

Was preparing plants in my tent about the middle of the afternoon when I heard shouting from the ridge to the north. Sent Willie to investigate and he soon brought in the maker of the noise. A big, smiling young abo who stood to a very knock-kneed attention and presented a letter from the head of Cowal Ck. Mission introducing him as Roy Stephen, come to work for us. Wore a filthy shirt and had left his swag at the sawmill -- too heavy to carry, said he. His military manner comes from service in the Marine Transport Corps during the war. Have given him to George to try out.

Wednesday May 12:

Botanical activities centered more or less on palms and pandanus. Found a single example of Nipa fruticans in a creek flowing into the next bay north, and collected two more palm spp. in the rain forest. Made fruitless search for fertile material of a common pandan of the rain-forest - a sp. with long stilt roots and persistent bracts; fruits all shed. After living among them for a week, I discovered only this afternoon that the wind-beaten pandans so characteristic of the coast sand dunes belong to two very distinct species.

Dick Holland arrived in his truck about 5 o'clock, bringing mails, Had arranged with him to drive us to Somerset and neighboring area on a reconnaissance trip tomorrow. Reports about 2½ inches of rain at Lockerbie. Weather has taken up today. Only a few scuds of showers. But the wind keeps on as before.

Friday May 14:

Yesterday we (George, Van, and my boy Willie) made our visit to Somerset to compare that classic locality with the areas we have worked on the tip of the Peninsula. From camp to Somerset we followed the coast, crossing the bald headlands on wheel tracks left by the army, and running along the hard wet sand of the beaches in between. Somerset is deserted. The old house in a bad state of disrepair, the roof rusting floors and roof starting to collapse, doors and windows broken open by vandals (crews of small boats), and the rooms swirling, and smelling, of bats. It was here that Frank Jardine, the pioneer cattleman and pearler, lived with his Samoan wife, Sana, and reared a family of two sons and two daughters.

Somerset was established as a govt. outpost almost 100 years ago, and a resident and a small garrison stationed there to guard the Queen's interests. John Jardine, Frank's father, was appointed resident in 1863. Next year Frank (then 23) and his brother Alec reached Somerset with a small mob of cattle, after an adventurous journey through the whole length of the Peninsula from Carpentaria Downs. They were attacked by blacks, lost most of their stores by fire. Arrived at Somerset with some 200 head of cattle, a few horses, and practically nothing else, Frank's only dress was a leather belt and a 45 Colt.

The cattle were let loose on Vallack Point, about a mile north of where we camped on Newcastle Bay. Later, in 1867 or thereabouts, they were moved to Lockerbie, where grazing was better and there was more

scope for cattle. Led by a castaway Frenchman, who had lived among them for years, the blacks were troublesome. In those days, that meant shooting. The blacks of the tip of the Peninsula were practically wiped out by Frank Jardine. My boy Willie, and an old man named Billy, are the only survivors of the tribe. One day, when I was getting abo plant names from Willie, I asked about his people. "Old Jardine bin shootem, long wild time," was all he said.

According to Holland, it is stated in Debrett's that Frank, scion of the baronets of Lockerbie, Scotland, married Sana, a Samoan princess. The royal blood is somewhat in doubt; even the marriage. Frank stole Sana. Carried her off from a mission in the Torres Strait, where, a girl of 16 or 17, she had come with others of her people to teach the gospel to the islanders.

With his fleet of luggers, based at Somerset, Frank probably did well at pearling. But his big strike was gold. Gold from a Spanish galleon he found on an outlying reef. So the story goes. Every child in Australia knows of that romantic treasure trove. Many a reef and coast has been searched for similar treasure. But when it is mentioned to old hands of the Strait, they recall the wreck of the "Quetta" not far from Somerset about 1890. The Quetta carried gold bullion. Frank had good divers.

Until his last days Frank was a terror to the blacks. (He always had several families as retainers at Somerset). When a feeble old man, able to walk only with the help of a long staff, he would call up a black who displeased him, stand him to attention, and strike him down with his stick.

Jardine died a leper in 1919, after fighting off death until the return of his favorite son from World War I. Cholmondeley ("Chum") had been home only a few weeks when the old man passed on. He was buried behind the beach of the sheltered cove in which his luggers used to anchor, below the old house. We saw his grave, caved in, and Sana's beside it, hidden from the beach by bushes and long grass. Son Bertie, the ne'er-do-well, had enclosed them in a fence of heavy anchor chains set in concrete pillars. The chains must have been very old and deeply rusted when they were put there. Bertie's concrete was a mere shell moulded over wooden frames. In the top of each pillar he had let in the broken-off neck of a bottle, as if to let in rain to rot the wood. The wood had rotted, and several of the pillars had collapsed. Most sordid, and curiously native, was the tombstone Bertie made. An oddly heathenish thing in its oriental intricacy of design, and childish in its miniature proportions. A slender-towered or minaretted idea in concrete, not three feet high, vaguely like the Taj Mahal or something Hindu or Burmese.

While George and Van swatted bats - 39 of them - I collected specimens from a wongai tree planted by Sana, then prowled around making photos while Willie gathered drinking nuts from a coconut plantation behind the house. Driving west along the old Lockerbie road, we stopped to boil the billy at rain forest fringed Polo Creek, about a mile west of Somerset. Heavy showers began as we ate lunch, and continued for the rest of the day. Gave up thoughts of visiting Paira, a type locality of interest to George, and returned to camp via Lake Boronto and Lake Wincheura.

Friday May 15:

Left camp at Newcastle Bay about 9:45 and were back at Lockerbie soon after 1 o'clock. Water from heavy rains had run in under our storage fly but our boxes, stacked well above the ground, were dry, and a rack of mammal skins left hanging under the peak of the roof were in good condition.

The beef boat being due at RIP in the evening, we wrote hurried letters after fixing camp and send them down with Holland, who had to meet the boat. Holland returned with a good batch of mail from the U.S.

Saturday May 15:

Drying and packing specimens. Van, with Moreton, to the sawmill to trap and hunt in the Big Scrub. Geoff to the carrier station on the telegraph line, in Holland's truck, to check on the shipping situation by calling up Thursday Island.

According to Asang, John Burke's agent, the Alagna should sail south from T.I. on the 27th or 28th. Thought of trying to hire a vessel to take us to Portland Roads, but the Alagna sailing will suit us well. We will have to cross to T.I. the day before the Alagna sails. Arrangements being made by B.P.'s for Wriford's barge to meet us at RIP on the 25th or 26th.

Planning to leave for Sanamere Lagoon on Tuesday. Van will remain at the sawmill if results are good there in the next two nights. George has a line of steel traps out in the rain-forest.

With not much more than a week left for work on the tip of the Peninsula, it is more than ever plain that an expedition with time limits like ours cannot do much more than sample an area so large, and varied as to habitat conditions. For mammals, another month north of the Jardine River should be profitable. I could stay on for two months for plants.

Sunday May 16:

Collected in the rain forest on the ironstone plateau along the Back Road. A few big trees, but poor rain-forest, and the presence of Bombax malabaricum is an assurance of a dryish climate. The forest notably weak in herbaceous undergrowth (only Eranthemum variable and one or two small ferns). The only epiphyte seen (without felling big trees, in the tops of which some may have been hidden from the ground) was an occasional shield fern. Among a dozen spp. gathered were the black palm (Caryota), and another palm which could be Cyrtostachys, but is very small and slender for the genus.

Found a Melomys in the top of the black palm. Dazed by the fall when the palm was cut down, it sat on top of a flowering spadix until I smacked it with the flat of my knife.

Made my first photos with the 4x5 stand camera.

Monday May 17:

Drying and packing specimens, and sorting gear for the Sanamere camp. We leave early in the morning and will not come back to Lockerbie. The two or three days of free time after Sanamere will be spent at RIP, where we will be handy to the boat and will be able to do a little collecting in a somewhat different type of country. Van will collect at the sawmill in the Big Scrub until Friday, move down to Lockerbie that morning, and go on to RIP when Holland goes that way to pick us up at Sanamere Friday afternoon or Saturday morning.

At Sanamere we will probably be joined by Jack Cupid, linesman in charge of the Cape York section of the telegraph line. He and his wife were over to visit us yesterday afternoon. Cupid is no kewpie. As rugged an individual as one could meet in a month of travel in the backblocks. Collects native orchids, and at one time collected and reared butteflies for a dealer in the south. His insects were collected on the Atherton Tableland, where he was employed by the Eacham Shire. When, ~~for~~ some years ago, Kajewski climed Bellenden-Ker to get seeds of Meston's mangosteen, Cupid was loaned to him as guide. They climbed the mountain from the west, and found the going easy.

Thursday May 20:

We are camped beside the telegraph line about a mile north of the Jardine River and 1¼ miles south of Sanamere Lagoon. Sanamere, when we saw it, looked unpromising for a camp site. Too much uniformity in habit for a center for several days, and tent poles would be hard to find in the stunted timber around the lake. Sanamere, about a mile long and wide, could be called a lake. It lies in miserable country. As seen in the dull, drizzling weather we are having lately it looks austere as an alpine lake. I collected on its shores yesterday. About 50 yards from the edge of the water the low tree (Banksia, Grevillea glauca, Acacia and Melaleuca) and shrub scrub of the surrounding ridges tails off into a very thin stand of knee high Thryptomene, Agonis and Restionaceae occupying still sloping grey sand wet with an even film of seepage water. Abruptly, when the lake is reached, the vegetation changes. Gahnia, Agonis and Melaleuca leucadendron var., growing on slightly hummocked peaty ground, form a dense outer marginal thicket well over head high. Pitcher plants scramble in these thickets, while in the Thryptomene-Restionaceae community the same sp. (Nepenthes) is an upright shrub less than a foot high, and unbranched. In deeper water is a zone of sedges (all sterile) in which perhaps the major sp. is a Scirpus or Lepironia. No water lilies out in the lake. Not a water bird seen.

Saturday May 22:

Broke camp at the Jardine at 8:15 and arrived Red Island Point about 11 o'clock. A showery morning, and we were wet and cold, sitting on top of the truck, until the sun broke through the clouds.

Was kept very busy with plants at the Jardine camp. The most productive habitats were a sandy messmate and bloodwood ridge (25 ft. contour on the military map, but most likely at least double that height) between camp and Sanamere, and wet or marshy depressions on the river plain. The messmate-bloodwood savanna-forest has an interesting shrubby undergrowth; quite dense where Melaleuca and Grevillea and Banksia, and the "Black teatree" elements tend to be dominant on the more barren sand.

No mammals were taken in traps by George and his boy. The only mammal taken was a female sand wallaby shot at night by George. I can not agree that the locality is a blank spot for mammals. In the old days, which ended not so long ago, the blacks had a regular camp on the river only a mile from where we camped. So far ~~th~~ on this trip we have had meagre results everywhere in trapping for mammals in savanna-forest. I think there must be small mammals in the savanna-forest, and some way of getting them.

Good collections of dragonflies and spiders were got by Geoff.

At RIP we found Van waiting for us. In the Big Scrub at Lockerbie Sawmille he trapped large numbers of the common forest Rattus leucopus, and little else. By shooting at night he collected, among other things, 2 Petaurus.

We have our gear in the wharf shed, and are living in a small military hut on the beach, in the cool shade of a fine Terminalia catappa tree.

Sunday May 23.

Yesterday after lunch we gave the boys their pocket money allowance and Sunday pay and let them off for the weekend at Cowal Ck. Mission.

Last night George and Van, in Holland's truck, made a long jacking trip over the maze of roads at Higgins Field. Dick Holland had been telling them for weeks of the mammals that swarm in the trees around Higgins Field, just waiting to be shot. For 5 hours of hunting they shot one wallaby and a feral domestic cat. George is more certain than ever that the savanna-forests are not much good for mammals.

In an old landing barge high and dry on the beach Van last night trapped our third or fourth specimen of the local marsupial cat, Saturnellus. The other specimens of this beast in the collection were caught or shot in abandoned military buildings. According to the Hollands, its chief item of diet is cockroaches.

Red Island Point brings a welcome change in diet for us, after some days on canned meat. Joe the cook, keen fisherman, has busied himself with casting net and handlines, with bounteous results in queen trevally and night fish, the latter about a pound in weight and something like a small barramundi to look at.

Friday May 28:

In uncertainty and delay in regard to boats, our move from RIP to Thursday Island conformed to pattern. The barge did not turn up until 4 pm on the 26th - two days late, and two days of lost time for us. Our traps and gear were packed ready to move on the 24th, and the barge was expected hourly thereafter. The Alagna arrived at T.I. on Sunday, but unloading of her cargo was delayed by dirty, rainy weather and wharf laborers will not work in rain. This rainy weather, in the southeast season, is said to be most unusual.

Upon arrival at RIP, a small amount of cargo was unloaded from the barge, and that done, the half-Samoan half-abo skipper and his white combo engineer decided they would wait till morning to load their return cargo of sawn lumber for pearl shell cases, and our gear. According to the skipper the Alagna was due to sail on the 27th; the engineer said the 28th. There was no information on the subject from Mills of B.P's, who never writes letters. I therefore decided to stir up the crew of the barge and get away before daylight. Going to the wharf at 2 am I found the lumber already loaded. We put our stuff on board, and waiting for a shower to clear off and the moon to give light enough to pick up the entrance beacon, we were away by 3:30. Arrived T.I. at 8 oclock and tied up alongside the Alagna for direct transfer of our cargo.

Yesterday was showery; further delaying the Alagna. We might get away late this afternoon, and it might be tomorrow morning. It all depends on the wharflumpers. Our cargo is on board, and our specimens from the Tip are well packed for shipment to Cairns.

Last evening was spent very pleasantly at the house of the Cadzows Other guests were four Torres Strait pilots, Dr. Barnes and his wife and Meek the bank manager and his wife.

After lunch yesterday Van slipped off alone and came back with 16 bats he had caught in an abandoned naval fortification. George is skinning them this morning. Van, unfortunately, has developed a sore eye. The doctor says an abscess, and wants to keep him under observation for a few days. Looks as if we might have to leave him in T.I. to follow us to Iron Range by plane next Thursday. Joe the cook is drunk. A high casualty rate for a day at Thursday Island.

We are staying at Kelleher's Federal Hotel, on the beach. Much better than the "Bloodhouse", where I lived ten days in February, but a poor place at that. The place is overcrowded and there is trouble with staff. No one to wait on table, and two girl boarders, who work at B.P's, are doing the job in a sort of way. Rough diamonds. At breakfast this morning I asked for sugar. Finding all the bowls gone from the serving table, she wheeled, glared over the crowded room, and demanded to be told "Who the bloody hell took all the god damned sugar." And no one smiled until she had left the room. The Geoff came in, late, and asked for breakfast. "Jesus Christ," she said, "I've got to work. Get it yourself." Ma Kelleher thought she had a waitress last week. Paid her plane fare from Cairns, and the girl went to work at the Bloodhouse.

Mammal results from the tip of the Peninsula were below expectations. A good yield would have been 500 specimens; instead we have 307 (I wrote somewhere else that it was 375). Trapping results fell off after Lockerbie, with its numerous rat population of two species Rattus leucopus and a Melomys). Most specimens were taken in rainforest. Results from the savanna-forests were poor. At least 21 species are represented in the collection. Which is good. And further, on the good side, we have topotypic material of 12 of the 13 forms which are thought to have been named from materials collected on northern parts of the Peninsula. The early collectors were vague about collecting localities, and perhaps it will never be known precisely where some of the early collections were taken.

Plant results for the Tip were 587 numbers, 3387 sets. I hoped for 650 numbers, but I consider the collection satisfactory. The great bulk of the plants are from the savanna-forests and true scrubs. I found the rain-forests poor in species, and most of the plants in them sterile. Still, a few of the smaller trees of the rain forests were about to break into flower, and a week of intensive work in the rain-forests would have paid well, I think. Time was too short for making a really definitive collection of plants from so large and varied an area of country.

Saturday May 29:

The Alagna, Captain Dan Cleary, got away from T.I. at 9 am sharp. Van's eye, under sulfa drug treatment, has improved enough to let him out of the doctor's hands. Joe turned up for breakfast and came on board haggard and tired, but reasonably sober. The only incident about our departure concerned one of our bicycles, which was carelessly left on the hotel porch and disappeared during the night. The loss discovered, Myrt Wriford the carrier suggested a tour of the other hotels and the missing machine, with Archbold Expedition label attached, was found in the back yard of the Bloodhouse.

The Alagna is an old, English-built ship of about 700 tons, with two two-berth cabins for passengers. Besides our party, there are four white passengers on board. The overflow sleeps in officer's cabins and on the settees of the saloon. The blackboys are under an awning on No. 3 hatch. A free and easy craft, plentifully grimed and powdered with soot and coal ash. John Burke boats are good to travel on. The crew members, at least those of officer rating, are all shareholders in the company.

Our course took us through Albany Pass. The old Jardine homestead at Somerset looks more dignified and impressive than at close sight. Reddish sandstone, caved by wave action, is exposed on the point of land on the mainland side of the north entrance to the pass. Similar sandstone shows on the Albany Island side of the pass.

The sand dunes of Newcastle Bay look insignificant as seen from the sea. Nothing to compare in extent and height with those of Shelburne Bay and the Cape Flattery area, further south on the Peninsula.

Sunday May 30:

At daybreak we were opposite Fair Cape, at the north end of Weymouth Bay. Bold rocky headland of granite (?) marking the northern extremity of the "solid country" of the Peninsula. I think the observa-

tion re solid country is attributable to Logan Jack, geologist, who travelled the length of the Peninsula in the late eighties. He noted no plutonic rocks between there and the small area north of the Jardine on the tip of the Peninsula.

Tied up at Portland Roads pier about 8.30 am. A gathering of eight or ten miners and prospectors there to meet the boat. Rather, they happened to be there. The John Burke steamer "Wandana" called in yesterday. She carried the first replenishment of stores to reach here in 1948, and most of the few men of the district came down from their mines and prospecting shows to meet her, and get tight. It looked like the continuation of an all night session. But only one man could be called drunk. This was little old Ted Densley. Some years ago--about 20--he opened up a rich gold reefing show at Wenlock, then known as the Batavia River diggings. In short time he took out gold to the reputed value of £50,000. Visited Sydney at the height of his success. Bought the taxi of a driver he got to like. Retained the driver to tote him around the town, and later brought him up to the Batavia, on a contract to do the carrying for the mine.

The taxi driver soon owned the mine. He and his sons are the head men of the Wenlock of today. Hugie Fisher, youngest son, was in the group at the wharf. A sober, presentable fellow, using a Leica as if he knew how. Discussed with him arrangements for transporting us from Iron Range to Coen.

Old Ted Densley is on gold at Packer's Creek, 3 miles out of Portland Roads. Goes barefooted (nothing unusual in this country) and lives with a gin.

We are camped in a 70 x 20 army hut, part of the wartime radar station, now owned by Doug Fisher (no relation of the Wenlock Fishers), who is said to have bought all the buildings of the camp at £15 a piece. There are holes in the roof of corrugated black iron, but there is a stove for the cook, ample room for all our occasions, and we have the use of Fisher's bathhouse and latrine. Very comfortable.

Doug Fisher and his wife most hospitable, and full of gossip. Not all nice, harmless gossip.

Our blackboys nervous about this place. The two mammal boys have asked for guns with which to protect themselves when running traps. Some bush blacks around. Some who refuse to be herded onto the Lockhart River Mission, some 30 miles to the south. Some outlaws who have cleared out from the mission, or drifted in from other parts. A police patrol said to be in the nighborhood, on the hunt for stray blacks.

There is a woman in the blackfellow story, as it concerns us. A gin named Ada, who is presently working for, or being sheltered by, the Fishers. Ada was the woman of a long, skinny Swede, who was one of the party on the wharf. Recently she ran off with a free bush boy, Norman, who is lurking somewhere near. The Swede is supposed to have sent word to the police about Norman's presence. Ada is shielding her beau, and trying to scare our boys into staying close to camp, and thus not seeing anything of any bush blackfellow.

Our party is now increased to 6 whites. Donald L. Vernon, preparator of the Queensland Museum, arrived yesterday on the Wandana,

and will be with us for a time to collect. The Queensland Museum wants mainly birds and mammals for exhibition purposes. Vernon an energetic, positive but quiet and likeable young chap trained at Melbourne museum. Pitched right in to help us upon our arrival. His museum should send him to New York and Chicago to learn techniques in which Australia is far behind.

Monday May 31:

Traps set last night yielded a 2 per cent catch: 1 Hydromys and 1 Melomys. Jacking last night, Van shot out of a tree what he thought was a possum, and George, something he thought was Uromys. Neither beast could be found on search this morning.

As a sequel to a visit to our camp last evening, Jack Gordon, who was one of the party on the wharf, has unravelled for me the mystery of that vegetable bunyip, the "turkey bush." From all quarters we have been hearing of turkey bush and marsupial tigers and taipans. The marsupial tiger may be truly a myth. The taipan, the "five-minute" snake terror of the Peninsula, has not yet found its way into our formaline can. When cornered on the subject, not one of our previous informants had been able to describe or point out a turkey bush. When we were at Lockerbie, turkey bush grew down toward the Jardine. "You go through five miles of it at Sanamere Lagoon," said old Dick Holland. At Sanamere, Old Dick said you had to go south of the Jardine to see it. Joe the cook said he knew it grew near Cleremont, 1000 miles to the south. After breakfast this morning, Jack Gordon, whose word goes without question on the Peninsula, took me a mile along the Iron Range road to a small shrubby patch. The shrub he pointed out as dominant of one of the six types of turkey bush scrub known to him, and present in all, was a true Australian heath of the Epacridaceae (18957). The same species was a major underbrush element of the black teatree scrubs 3 miles from Lockerbie, and at Newcastle Bay, and Sanamere and the Jardine River.

Friday June 4:

Have about finished our short term at Portland Roads. We move in to Iron Range tomorrow. Work here, interrupted by a reconnaissance of the Iron Range area, has yielded me 87numbers, 557 sheets.

Most of my plants were collected in the savanna-forests, and on the Aylen Hills. A few came from brushy rain-forest on the hillsides and on sandy flats behind the mangroves. The country is generally sandy granitic ridges on which only occasional granite rocks are seen. The prevailing vegetation is savanna-forest in which a bloodwood (18952) is principal tree. Another bloodwood (18964), identical with the species prevalent north of the Jardine, comes in on flats and the lower ridges. On the stoney slopes and spur ridges of the Aylen Hills a box (Eucalyptus 18991) replaces the bloodwoods. Moreton Bay ash occurs in abundance, and grows to larger size than any of the other eucalypts, about the edges of the small bodies of rain-forest. Broad-leaved forms of protean Melaleuca leucadendron are the principal trees on sour sandy flats, while a narrow-leaved form, with stem divided near the base, grows along the edges of sandy watercourses. Apparently not one of the forms of M. leuc. collected north of the Jardine occurs here, and vice versa. A Hakea (18958), the first seen on the Peninsula, is common locally on the teatree flats. A glabrous, small-leaved Petalostigma (18970), very distinct from the widespread P. quadriloculare occurs with the latter species on the lower ridges.

Probably because of the more uniform habitat conditions, the savanna-forests are poorer in species than those of the Lockerbie area. The deficiency is especially noticeable in grasses, and in small wet season herbs of the teatree flats. Some grass species very important at Lockerbie are missing here. The tall Pennisetum-like grass dominant on the deeper soils at Lockerbie seems entirely absent from Portland Roads, where its place is taken by Heteropogon contortus, a minor species at Lockerbie.

H. contortus, a troublesome spear-grass, is now shedding its ripe seeds, which go through our tough khaki trousers as readily as a tin tack. It is the dominant grass of the bald parts of the Aylen Hills. Grevillea glauca, some 10-15 ft. high supplies most of the thin sprinkling of trees.

The Aylen Hills are a ridge of granite rising from the edge of the sea to a maximum height of 390 ft. in Aylen Peak. The northern part of the ridge is mainly rocky grassland. On the inland slope of the south end of the ridge are sizable patches of brushy rain-forest which are not shown on the military map. The seaward slope for its whole length is more or less grassy and rocky, in parts thinly covered with leaning, windclipped low scrub, and carrying a few small patches of brushy rainforest. The grassy condition is a feature of many of the hills and mountain ridges fronting the coast from between Cape Tribulation and Cooktown to Somerset. Bald hills and ridges are characteristic of this great length of coast in areas in which rain-forest can be seen from the sea. The grass, it would seem, occupies terrain formerly rain-forested. Destruction of forest by fire would appear the only feasible explanation. The crews of small boats, ranging the coast for trochus and trepang and sandalwood in recent historic times, may have been responsible for the firest

Mammal results for Portland Roads have been poor. Thirty specimens of about 10 species. Probably the best mammals to turn up were four Rhinolophus which I killed with a switch in the concrete magazine of the coastal artillery outfit which guarded the harbor after the Japs were defeated in the battle of the Coral Sea. On parts of the ridges the bark of the trees is all scratched by arboreal mammals, but only one specimen, Petaurus, has been taken, despite much night jacking, cavities with a long stick, without finding anything. Selective felling of trees, with axes and natives which are on hand, might be the solution.

Yesterday, with George and my blackboy, I made a reconnaisance of the Iron Range area. The results confirm my first impression that the site of the former AAF radio station is the best place for our Iron Range main base, and I have made arrangements for camping there.

We were to have made the tour on Wednesday but the unreliable Doug Fisher failed to provide a truck I had arranged to hire for the day. Started for Iron Range before daylight in another truck driven by Barry Fisher, who took us to the main Roads camp, where Barry works, carrying gravel for a road surfacing job. When major Air Force operations ceased at Iron Range during the war, thousands of drums of tar were on hand to surface two subsidiary air strips. Main Roads is using some of the tar to surface the 6 miles of road between Gordon Field and the old radio station. A work of high policy, apparently.

Although under instructions to assist us with motor transport, Pinwell, foreman in charge of Main Roads operations, did not seem anxious to go out of his way to help. He did offer to drive us down to the drome to see the mail plane in from Thursday Island. His attitude changed completely upon the arrival of the plane. In the mail was a letter I wrote him from Lockerbie on May 16, telling of our expected arrival and our plans! Stepping into his jeep, Pinwell drove to all the sections of his gang, telling them he was off for the day, and away we went.

Gordon Strip, the main wartime airfield, and present civil drome, is approximately six miles south of the point where the Wenlock road branches off the wartime military road connecting Gordon Field with Portland Roads. A big hut, on the site of the wartime radio station for air operations, is situated a couple of hundred yards or so north of the Wenlock and about an equal distance of the east branch of the Claudie River. The Main Roads camp of about 10 men is on the site of a wartime CCC camp about half way between the radio station and Gordon Strip.

From the Main Roads camp we drove to the road junction, crossed the east Claudie by a bridge in riverine rain-forest, and followed the Wenlock road west and west-south-west to examine the country. In another 1½ miles or thereabouts we crossed the Running Claudie (the only one of the three main branches which runs through the year) by birdge, and about a mile further on, forded the west branch of the Claudie. Thereafter, the road ran close to the south bank of the west branch, and in about 8 miles in all from the Wenlock turn-off (6 miles airline) we came to the foot of Mt. Tozer, and the entrance to Tozer Gap. Tozer Gap is a low saddle in the granite range which Logan Jack named Janet Range. On the military map the range north of the gap is called Janet; south of the gap it is called Tozer Range. Mt. Tozer, 1784 ft., is the highest peak on the whole range. Other peaks rise to 1500 to 1600 ft. The gap is about 400 ft. At about noon we reached our farthest point, in the gap, about north of Mt. Tozer, where the billy was boiled and we had lunch.

The country traversed was alternating rain-forest and savanna-forest. If one accepts the interpretation of the military map makers, rain-forest greatly predominates and is broken by isolated pockets of savanna-forest. From what I saw, I should say the rain-forest occurs mainly along the streams, while the country in between streams is mostly savanna-forest. The Gap is savanna-forested. Rain-forest appears again on the east and west slopes of Mt. Tozer. Sheer granite cliffs occur on the bold north and east faces of Mt. Tozer. Trees grow tall, and there are many palms, in the rain-forests along the road. The road itself, where it passed through rain-forest, was overgrown by tall weeds, and slippery from the rains. Showery weather - most unseasonal, it is said- has prevailed for weeks, making the Wenlock road practically impassable as far as Tozer Gap for anything but vehicles with 4-wheel drive.

A spring-fed gully in the Gap was chosen for a future camp from which to work Mt. Tozer and the higher parts of the range. There is a big area of country above 1000 feet in elevation.

Collected a few plants in the Gap while the billy boiled. A fairly dense shrubby undergrowth in the savanna-forest is dominated by Agonis 19028, and contained pink-flowered Boronia 19031.

Returning to the main road, we called on Mr. and Mrs. Bert Connell, who live in part of the old radio hut, and were immediately invited to occupy the rest of the hut as our Iron Range base. We will have floor space of about 40 x 20 feet, a place in a big garage for our blacks, and a range in an outhouse for the cook. A very fine set up, especially if the weather continues wet.

Saturday June 5:

This evening we are comfortably settled in the old radio but at Iron Range. Were transported here by Doug and Barry Fisher, each carrying about 1½ tons on his truck. Carrying rate, 1/6 per ton per mile, plus coupons for gas consumed. North of the Jardine we were in country in which motor vehicles are still run on gas scrounged from military dumps.

Sunday June 6:

Started collecting with an excursion through the rainforest of the flood plains, across the bridge and downstream from camp. The rainforest strip along the river is about 1/4 mile in width; beyond that, with the rise of the ground, bloodwood savanna-forest comes in. My farthest point was about 1/2 mile down the river. Floodplain of deep, fertile-appearing loam, cut by deep watercourses entering from the savanna. Forest very tall. Many giant trees which must be 150 ft. tall and a good 6 ft. in diameter above the buttresses. Some species, including a fig, now losing its leaves, have enormously developed buttress roots. The size of the canopy trees, and the prevalence of pig rootings, are the most striking features of the forest. It seems poor in species. Floods of last wet season, inundating the plain to depths of 6 to 10 or 12 feet, have swept the ground clear of leaves. There are very few herbaceous species in the undergrowth. Most of the trees and undergrowth plants are sterile. Apart from Calamus, of which I saw 3, possibly 4, species, climbing plants are few. Most of the few epiphytes live high on the great trees. All in all, the floodplain forests, on first view, are disappointing.

Monday June 7:

The weather seems to have taken up. Only a few very light showers have fallen since we arrived here on Sunday. Days pleasant; night quite cool.

Another disappointing day in the rainforests for me. Got away from the floodplains and spent the morning in the rainforests of the lower ridges within 3/4 mile of camp. Leaving the streams, which run only in the rainy months of the year, and are quite full now, the rainforest diminishes rapidly in height and volume. Out 100 yards or so it could hardly be called rainforest. A stand of regrowth or marginal community polewoods, with occasional large trees; probably subject to burns in dry years.

Two days in the rainforests have yielded me 44 numbers, mostly spp. of the undergrowth. Have marked, for early attention with the axe, youngish specimens of several of the large forest trees which are now in flower or fruit.

The mammal men have got off to a slow start with five spp. for two nights trapping and jacking, and some day hunting. Rattus aff. leucopus, Melomys, Uromys, spotted phalanger, and a Phascogale have been taken. The Phascogale represents a big northward extension of range for its group. A larger number of traps are out tongith.

Vernon is kept busy with birds. Many species here, and Pinwell of Main Roads drives up a couple of times per day with big birds such as the palm cockatoo, and megapodes.

Tuesday June 8:

Botanical prospecting of the area took me 3 miles back along the Portland Roads road to some infertile hills of broken quartz rising about 350 ft. above sea level. In clear weather, the sea can be seen from the tops of these hills. Today was showery, and blowing hard from the southeast. This bad weather is perhaps mainly coastal, for inland a few miles the Janet Range stood out fairly clearly and I was able to make photos a stretch taking in Mt. Tozer, South Pap and North Pap.

The dominant vegetation type of the quartz hills is a low shrubby growth of Agonis and grasstree (Xanthorrhoea), in which are rather widely spaced small trees such as yellow-flowered "black teatree," red-flowered form of Melaleuca symphyocarpa, Casuarina, and Banksia. Cattlemen call this type of country "desert." It affords lean pickings for cattle and horses, but usually it is rich in species of plants. Not so these particular ridges. The only notable plant new to the collection was Xanthorrhoea, which still carried a few old fruiting spikes.

It is not generally known that the tender heart of the grasstree is as good to eat as the cabbage of most palms. I ate some today. Tender and sweetish. The resin of the plant has been used in the manufacture of explosives.

My trip to the quartz ridges, and Willie's, was per push bike. Willie assured me that he could ride a bike "little bit." His exhibition reminded me of my recent trials at Lockerbie. Willie could pedal long the wide military highway after I held the machine for him to get on. I thought him a goner on one stretch. My procuedure was get him mounted and started, then ride slowly ahead to give him a lead. By listening for a squeak in his bike, I could tell he was coming along without turning my head, and perhaps capsizing myself.

Gaining some confidence in my pupil, I thought on the homeward trip that he was good enough to take moderate downhill going. I had barely started down a long slope when I missed the squeak behind me. Then Willie came hurtling by, feet hanging, machete swinging from his belt, and a big bag of plants on his back. I could only call to him to hang on and steer straight. There was a bridge over a deep creek at the bottom of the slope, and the bridge had no siderails. Willie's nerve lasted just long enough. When almost over the bridge, he gave a dangerous wobble, recovered, and landed in a bed of weeds on the far side.

Wednesday June 9:

Yesterday's collection, mediocre as it was, amounted to over 170 sheets of specimens, and, my presses full and on the drying frames, I spent the day on odd jobs and letter writing. The mail plane (Douglas DC 3) calls at Iron Range Wednesdays on its way from Cairns to T.I. and picks up return mail on Thursdays.

Have placed an order with Mrs. M. Armbruist, butcher of Coen, for a weekly supply of fresh and corned beef. The first lot, of very good quality arrived this evening. Fresh beef costs 8d per pound, corned 6d, plus air freight of about 6d. Really choice sirloin is costing us about 25 cents or less per pound, delivered by air.

Thursday June 10:

Worked north through the floodplain rainforests of the East Claudie to the junction of Gordon Ck., then followed the creek up to the road. Carried an axe today, and collected four large trees, Panax 19109, Sapotaceae 19111 with large fleshy fruits, Rubiaceae 19114 of the sub-canopy, and Myristica 19115. The undergrowth of the floodplain forests traversed is amazingly poor in species. More undergrowth spp. come in on old alluvial flats elevated above the floods, but still the flora is poor. But for great size of canopy trees, these forests are as spectacular as any I have seen, when large trees are found grouped together.

Friday June 11:

Except for a large tree of the Proteaceae (19124), today's plants are from the hill savanna forests. Visited the 250 ft. ridge crest of the Iron Range proper on which Jack Gordon's old mine is situated. Contorted schist formation highly impregnated with iron. The schist is said to be a rather narrow strip with granite to east and west.

Gordon's mine is said to have produced over £100,000 worth of gold. It was abandoned in 1942. The machinery and even the top timbering of the main shaft was removed for military purposes during the war. The gold occurs in the schist lode formation and is too fine to see. Connell and Holmes are now working a show on the same line of lode, about 50 yards to the north of Gordons. In their show, rich specimen gold is got in small blobs and leaders of quartz. Gordon's mine was richest on top, and petered out at round about 150 ft. Some of the surface stone returned as much as ounces per ton.

The iron ore is reserved by the Commonwealth Government. Before World War II, when Japan was scouring the world for iron and steel, Iron Range was inspected by one Umeda and the Japs tried to get a concession for its development. Current local talk is that the ore assays 32per cent iron, and that the Japs reckoned on shipping pig from Portland Roads at a production cost of 10/- per ton. On surface indications the quantity of ore is enormous.

Mammal results are looking up. We now have from the area about half dozen spotted cus-cus. Last night Van shot a large female Phalanger ORIENTALIS; previously known from New Guinea and from the Rocky Scrub, to the south of here. A small Melomys, described from the very tip of the peninsula (Paira) years ago, and found by us at Lake Daviumbu in 1937, has been trapped. Today George and Van have been bat-hunting in No. 3 adit of Gordon's mine and collected large Hipposideros diamemi, a small

sp. of that genus, and a Rhinolophus.

My best plant for the day was Xanthostemon crenata, from the iron ore ridge, and a new record for Australia. I discovered the species on the Oriomo River, in Papua, in 1933.

In reptiles, the day brought our first death adder (killed on the road by Pinwell of Main Roads), and a 9ft. 6 in. carpet snake, also the fourth of a series of freshwater turtles. Geoff has his lamp and inverted cone hanging in the rain-forest for night-flying insects.

Saturday June 12:

Every day since we have been here has brought a little rain in light showers. Through today, the showers were heavier, but not so heavy or prolonged that one could not keep fairly dry by sheltering against tree trunks, or better still, under the upturned leafy crown of a Pandanus.

Today's plants, 23 numbers in all, were from the rainforest on the north side of the bridge over Gordon's Creek. Included were three trees of the canopy layer - Anonaceae 19152, Terminalia 19149, and No. 19157, the latter now conspicuous with an abundance of small white flowers. The best plant no doubt was the palm 19159, a noble species of which the only specimens I have seen are the mature tree I cut down, and two juveniles, growing along the banks of Gordon's Ck.

Passed the 1000 mark in botanical collection numbers; collecting in the rainforests is slower than in the savanna-forests in which up to the present most of my plants have been taken. Cutting trees takes time and hard toil, but usually the fall of a big tree will bring down a vine or an epiphyte or two which help to swell numbers and round off the collection.

Two or three more cus-cus shot today by Moreton. George and Van unable to keep ahead of skinnning. Plants kept me busy until 9:45 PM; mammal preparations went on until after 11 without clearing up the backlog.

Sunday June 13:

With Horace Moon driving the Main Roads jeep, and Pinwell, George and I as passengers, we set out at 8 am on a trip along the Wenlock Road. With stops to collect plants and insects, and to look around, we reached One-Mile Creek, our farthest point, about noon. While Moon boiled the billy, I hunted plants, and George and Pinwell climbed a high granite hill through long grass to try for a wallaroo. A mob of 5 wallaroos frequented this hill when the roads men were doing repair work here last year. They were not there today. Perhaps they had moved to patches of burned country some miles back along the road.

From Tozer Gap the road follows gaps and small valleys through hilly country in which the granite outcrops occasionally. Soils poor and sandy. Vegetation generally a savanna-forest of messmate and bloodwood with grasstree and shrubs in the undergrowth. The poorer ridges carry tall shrubberies of Agonis and other species, all called turkey bush by our companions.

I had hoped to go on as far as the crossing of the Pascoe, but

for some personal reason Pinwell did not wish to meet "Snowy" Baker, a Main Roads man who is doing a survey of the crossing. We drove to within about 4 miles of the river. Brown's Creek, already under consideration as a camp site, proved the most interesting and different country botanically, but I doubt if there is enough change in the country to warrant a mammal collecting camp here after working Tozer's Gap. Rocky granite hills, carrying scrubby low forest, and extensive areas of turkey bush, make Brown's Ck. attractive botanically. The spring-fed running creek has made the road crossing a favored camp site for travelers. Many plants occur which I have not seen before.

Pinwell turns out to be a very keen observer of animal life and a man with considerable knowledge of creatures that live in the bush. Through his knowledge of their habits, we were able to collect specimens of a small dark brown crab that hid under boulders half buried in the sand of One-Mile Ck. And on the way home he stopped the jeep to cut out a "sugarbag" (nest of a native stingless bee). The makers of the sugar bag were a bee of the kind that builds a protruding funnel of wax as an entrance to their nest. Honey very dark in color, and very heavily sweet.

Monday June 14:

Overcast day with some heavy showers through day as well as last night. Wind abated, and more southerly than SE. These may be the regular June rains.

Spent day in camp, attending to yesterday's take of 24 spp., and the ordinary routine of attending to collections. Many of the rainforest plants are thick and fleshy and have to be put through the driers two, or even three or four times.

The country visited west of the Janet Range yesterday is climatically dryer than any visited previously on the Peninsula, and there are marked differences in flora, especially on the ridges which carry shrubberies called turkey bush. Most of these shrubberies are dominated by Agonis. I saw a few heath bushes in only one place. My collections were mainly from the shrubberies, where plants were easy to see from the jeep. Numerous new additions to the collection in genera and species, including my first conifer for the trip - Callitris 19185, from Brown's Creek.

Another "first" for Van was a Sminthopsis (marsupial mouse) caught in one of his traps this morning. George says probably a race of a species of which he collected a large series on Lake Daviumbu in 1936. Genus previously unknown from the Peninsula.

Cus-cus keep coming in, and today Moreton departed from the straight and narrow and shot a tasty porker from which we had chops this evening. Cus-cus collecting uses up cartridges at a rapid rate. Eight shots were put into the last specimen, and then the boys had to cut the three down to get it.

Don Vernon now has a blackboy to hunt for him. One of a party returning to Lockhart River Mission from employment on a trochus vessel called the "Southwind". James Butcher is supposed to be a good hunter. Don needs him. Don works and tries tremendously, but he is inexperienced in field work and has yet to get one of the mammals he wants for mounting.

Friday, June 16:

With Geoff for company, and Willie carrying collecting bag and axe, this AM I went to the top of Mt. Shea (648 ft.), the highest point on Iron Range proper. Mist clouds hang on the sharp top of the mountain in early morning, but when looked at through glasses scrub hickory (Acacia) can be distinguished in the covering rainforest, and where hickory grows the forests are always oryish and brushy. The only interesting plant for a poor morning's collecting was palm 19250, common in clumps at 4 to 5 hundred feet and not seen elsewhere.

Including 4 spp. of Calamus, I have seen 11 spp. of palms in the Iron Range area, and collected five of them. Have not been able to find flowers or fruits of the others. Have noticed that one small palm, common in floodplain rainforest, and usually dead or dying, is being attacked by some mammal, probably Uromys, which eats out the "heart" of young leaves.

Yesterday morning I went down to the drome with Pinwell to see the plane come in, and afterwards we drove south several miles on one of the old military tracks leading over and between poor messmate ridges in the direction of the coast. Country very poor for plants, but one botanical prize was Isoetes 19218, found by merest chance while digging small herbs from shallow moist soil in the rock bed of a seasonal stream. The messmate (Eucalyptus tetrodonta) ridges rank next to the turkey bush country for sterility of soil, and heaths and other turkey bush shrubs are often found on them.

The tempo of the hunt for larger mammals has increased amazingly since Don Vernon's blackboy started on the job three days ago. Old Moreton, George's hunter, is working as never before, but it looks like a lost game for him. Using a single-barrel shot gun which I have loaned him, James in his first morning brought home 3 cus-cus. In four days he has shot 7, and an Echidna. The echidna was actually dug out from amongst the roots of a big tree in floodplain rainforest, and brought in alive. Vernon has presented it to us, and we have given him a magnificent male cassowary which Moreton somewhat salvaged his reputation by shooting yesterday.

Saturday, June 17:

Following a track which George has cut for trapping, I spent the morning in the big rainforest body north of the Wenlock road and between the East and Running Claudie Rivers. Traversed the flood plain of the East Claudie roughly NW west for about a mile, then mounted the 150-200 ft. ridge between the two rivers. Soil on the ridge generally stoney and the forest anything but luxuriant and containing a good deal of the acacia-hickory.

Cut down several fair-sized trees, but the most interesting collection was the common gregarious bamboo of the forests (19255). This bamboo is abundant on the floodplains in extensive thickets up to perhaps 20 ft. high, and it is also found on the x moister soils of the ridges. It appears to have two growth forms, and after flowering it dies. Apparently, when about to flower, it sends up stems much longer and thicker than those seen in any of the non-flowering thickets. Seeing thickets of these 30 to 40 ft. stems, almost always completely dead, one is apt to think there are two spp. of bamboo in the forests, but a comparison of the leaves shows that the dead thickets and the living ones are of the same species. The stems of this bamboo are obscurely 3-angled, which is most unusual in bamboos, and the walls of the internodes are so thin that a stem an inch thick can be crushed between finger and thumb.

The latest mammal of special interest is a small, rudescent bandicoot which Van found dead in its form. Quite different in color from any bandicoot we have collected on the Peninsula or in the Cairns district. A fruit bat of the New Guinea genus Dobsonia, shot by Van, is the second specimen known from Australia.

For three consecutive days we have had no rain. Temperature fell to 58 F. this morning, and those who thought back in New York that three blankets would be enough for the tropics are sorry now. There is a nip in the air this evening, and I have issued spare canvas load-covers to the blackboys to help keep out the cold. 58 F. for a rain forest area 50 ft. above sea level and about 15 degrees below the equator, is quite a low temperature.

Sunday June 20:

Geoff and George, the two-blanket men, turned in last night fully clothed and with sweaters, and Geoff in his raincoat. Their third blanket I find today is in Cairns. Temperature low this morning was 56 F. Clouds are building up toward the coast and this evening is warmer.

This Sunday's trip in Pinwell's jeep was along the main road as far as Dirty-water Creek, 10 miles toward Portland Roads. A good bag of plants, mainly from the gully rainforests. The best species were probably a fanpalm (Licuala or Livistona 13287) and Balanophora 13288. The latter, a root parasite, grew in plenty on leaf littered ground below floodmark in the forest edging Dirtywater Creek. The flowers do not have the mouse-like smell of a species which occurs in New Guinea. Another good plant, unfortunately sterile, was Manilkoa, a New Guinea genus first recorded for Australia from a collection made by Flecker at Iron Range in 1944. At this time of year pink young foliage hangs from its big terminal leaf (and branch) buds, and I have seen it at Iron Range as well as in the locality where I collected it today.

Have decided in conference to move from here a week from tomorrow and establish camp at Toner Gap, in the mountains about 8 miles to the west. In the interim, subsidiary camps for mammal collecting will be worked at Iron Range airdrome, 6 miles to the south, and at the south end of Iron Range, about 4 miles to the southeast. The remainder of my time here will be spent in the rainforests, which yield few plants for a morning's work, but always something good.

Provisionally, we plan to spend 2 weeks at Toner Gap and 1 week at Brown's Ck., 12 miles farther west. From there we will come back to Iron Range to pack specimens and reorganize before going on to Weipa and Coen. We should arrive at Coen about July 20, and at Cooktown about the end of August. Allowing 6 weeks for work in the Cooktown area, and getting to Cairns from there, our total time in the field will be just six months.

Tuesday, June 22:

Yesterday spent in camp, preparing Sunday's collection and packing dry material. The two Coleman pressure lamps which I have used constantly for drying plants for the past two months are beginning to show the strain. Have a good stock of spare generators but find that the spanner supplied with the lamps will not unscrew the generator lock nut. The spanners slip around the nut when pressure is applied.

Back in the Iron Range rainforests today, and by axe work, collected some good species, of which Omphalea 13290 is perhaps the best. This large liana, frequent in the rainforests, is easily found by the big soft orange fruits that fall to the ground. It looks very different from O. queenslandiae, found in the Cairns district and producer of a large seed edible when cooked.

Yesterday afternoon George was driven by Barry Fisher to the Scarlet Pimpernel mine (long abandoned) on the South end where, according to Mrs. Fisher, a fat-tailed mouse occurs. Set out 80 mouse traps, camped on the floor of the truck, and returned empty handed this morning.

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This morning Van was driven by Barry to the Iron Range airdrome to collect for a couple of days. The vegetation is different there - mainly messmate savanna-forest ridges, and a couple of nights trapping and jacking might discover differences in the mammal fauna. Geoff went along to collect insects and reptiles. They are staying with Leo Ferris, the groundsman, who last week told me a long story about a jumping mouse which he chased across the flat near his shack. Most people we talk to tell of strange creatures, usually extra small or extra large, that they have seen in the bush. One never knows how true these tales may be, so, whenever we can, we follow them up.

Wed. June 23 :

A strong southeaster has sprung up again and the sky is overcast and threatening rain. These dull days add to the difficulty of plant collecting in the rainforests. This morning about 8 o'clock when I thought of photographing the huge serpentine buttress roots of a fig tree I got a Weston light meter reading of .8.

For 4½ hours of work in the floodplain rainforests this AM I got but 5 species of plants. For tall rainforest, these are the poorest I have seen for undergrowth plants. Usually when botanizing in rainforest, tracking fruiting and flowering trees and canopy lianas by fallen flowers and fruits, and by the noise of feeding birds and the buzzing of insects away up top, one comes across undergrowth shrubs and flowering herbs which by their color relieve the gloom of the forest, and help to fill the bag. Most of the very few herbaceous undergrowth plants of the Iron Range forests grow in lighted edges where rainforest joins savanna-forest. The banks of streams, when they lie open to the light in rainforest, are usually prolific in small plants. Not so here. I have not found a single streamside plant on the silty, pig-rooted banks of the Claudie.

Geoff back from the airdrome with the mail this evening, with numerous insects and small lizards. Van got nothing new in traps last night, but he has collected two echidnas and is not on the trail of the jumping mouse.

Thursday, June 24:

Van returned this morning by Pinwell's jeep without the jumping rat of the airdrome area but with the third specimen of Rhinolophus Seemani to be collected in Australia, three echidnas, and sundry rats and the two small marsupials of this locality. One of the echidnas was found hopelessly entangled in a camouflage net left by the armed forces.

A good lot of plants taken from the rainforests of the first gully to the south, including a very large Pandanus (19309) recalling P. novoguineensis of the Fly River region, a monoecious Balanophora (19323) which seems different from the sp. collected on Dirtywater Crk., the crinkled "Golden Orchid" (Dendrobium undulatum) and the 7th sp. of palm (19310) for this camp.

The strong, gusty SE wind, and overcast weather are with us again; but so far no rain.

Friday, June 25:

What will probably be my last day in the field here yielded no plant of special note, although, despairing of finding fertile specimens of a magnificent Freycinetia which grows in the moist ravines, I took sterile material of it (19328).

Several 4 x 5 photos made in the rainforest ravine where the big Freycinetia, exceedingly tall Clubia palms, and many strange pandan trees grow in swampy bottoms.

A nice shipment of four boxes of zoological material and 4 cartons of dried plants despatched by Barry Fisher to Portland Roads to go to Cairns on the Wandana due to return south about the end of next week.

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Sat. June 16:

Sorting gear and stores, and packing, with an apprehensive eye on the weather, which has thickened and become showery. Barry Fisher is to move us to Tozer Gap in the morning and the road through the rainforest will become slippery and even dangerous for a 2-wheel drive vehicle if any considerable amount of rain falls.

Iron Range has fallen short of expectations for plants, with only 298 numbers for three weeks of work. Sheets or sets of specimens number 1729. Apart from roadside weeds, which I have not touched, but which might include new introductions to the country, made during the war, I have collected practically every plant of the rainforests and savanna forests which I have found fertile. Two exceptions, which I might have collected today but for the rain, are a very large Nauclea ("Leichhardt-tree") of the floodplain rainforests, & the common black palm (Caryota). Will probably get these at the next camp.

Mammals for the camp number 250 plus, bringing the total for the trip to 899. The camp turned out much better for mammals than any of us expected during the first few days. As in plants, numbers are not large, but they include very good things.

We were about to start dinner when Malcolm Holmes, the miner who lives in the other end of the hut, came in bloodsmeared and woebegone. Out pig hunting a mile down the road, he had fired his .303 through long grass and shot one of his dogs through the neck. The bullet missed everything vital, but tore out a four inch hole where it came through, and almost carried away the dog's right ear. For the first time, our surgical supplies came into use, by George, with my assistance in finding them, and sundry help in opening ampoules of novocaine and sutures, and the usual plentitude of advice from onlookers.

Sunday, June 17:

Was wakened well before daylight by the noise of wind and rain, and Joe's blasphemy out at the stove in the outhouse. The rain was but a shower. By eight o'clock we were all packed up and sitting around waiting for the noise of Barry's approaching truck. About eleven we heard an engine, but from the direction opposite Portland Roads, and Leo Ferris, from the airdrome, came along in his bright yellow blitz buggy, with a prospector guest from the Wenlock, one Scotty Ross, sitting beside him. (Leo usually has a guest or two from the country back over the ranges).

More waiting. Joe boiled the billy. Then Leo said he was going back to the drome to fill up with gas to take us out to the Gap. He was back in half an hour with news that Ned Pinwell would be along in his jeep to help with the move.

With a blitz buggy of 1 ton weight carrying capacity, driven by a self-styled "worst driver in the world", it was necessary to make two trips with our gear and personnel of nine men. With the cook and the boys on the blitz, and George and Van in the Jeep with me, we started off at 12:40 and arrived at the Gap about an hour later. The blitz passengers had a terrible ride with Leo who fumbled gears, stalled, ran backwards down steep grades and almost went over the side of one of the bridges.

A camp site chosen on a well-drained savanna-forest ridge between two running gullies in the eastern part of the Gap, we unloaded and set about getting tent poles while Ned returned to Iron Range to give Leo a little moral support on the second trip with the rest of the gear, Geoff and Don Vernon.

Thanks to the rallying-around of Leo and Ned and a very good display of efficiency by our own party, we had all tents and flys rigged and were comfortably under cover before dark. Besides, 40 traps are out. A strong southeaster blowing, but no rain. We are on the right side of the rainforest if rain should come. A truck which arrived from Portland Roads before our second load left Iron Range brought no information as to the reason for Barry Fisher failing to appear.

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This has been a remarkable day in more ways than one. While we were sitting on our boxes grousing and reading old magazines this morning, Malcolm Holmes' cat stalked in with the second bandicoot we have seen in this district, and our 900th mammal specimen. When Ned Pinwell drove up he brought a specimen of the rare Dobsinia fruit-bat...I think the third or fourth specimen taken in Australia. The truck coming from Portland Roads brought another bandicoot from old Ted Densley who lives on Packer's Creek. All in all, a very good day.

Monday, June 28:

A day of varied activity - camp making, collecting, and exploration. The three boys were on camp jobs all day. Making drying racks for mammal specimens trays, cutting the grass from under tents and flys, making a dining table of split palm (Geoff forgot to bring a door which Joe had scrounged for a table), building a stage to keep the foodstuffs well above the damp ground, and, under the joint supervision of Geoff and Don, making a pit latrine and erecting over it a most remarkable shelter of fan-palm leaves. The pride of the architects of the latter feature is in no way dampened by the fact that the roof leaks - they made it flat, without a pitch to carry off water.

The ~~xxxxxxxxxxxxxxxxxx~~ exploration was done by George and Van. Van climbed most of the way up a 1000-foot outlying granite peak of Mt. Tozer, which rises boldly immediately to the west of camp, and looks much higher than the elevation given on the map. George by-passed the outlying peak and cut trail up to about 800 ft. on the main ridge of the Tozer Range, striking for Mt. Tozer itself. An excellent start in the work that lies ahead of us in getting at the high country of the range.

The 40 traps last night caught one Sminthopsis, a Rattus and a grassland Melomys, similar to those taken at Iron Range. A bandicoot, flushed from the cover of a log, was slain by old Moreton with a tomahawk. Bandicoots always come to us by extraordinary means - we have not learned how to trap them.

Nothing of particular note in 10 spp. of plants collected near camp by me.

Tozer Gap's other name is Windy Gap, and very appropriately so. Very strong southeaster today, and heavy showers from about four o'clock into the evening. Temperature this morning at grey dawn was 64 F.

Tuesday, June 29:

Spent the day on the 1000-foot granite outlier of the Tozer Range. It is actually the northern termination of the range, dropping as it does, into Tozer Gap. The continuation of the range north of Tozer Gap is called Janet Range on the maps.

Put my plants on to dry, in charge of the cook, and left camp at 8 o'clock with Willie carrying a fresh-cooked lunch of puffdelooneys in the plant bag. The cool nights have played up with Joe's yeast dough. Got back to camp at 3:15, the day being spent without water.

By following a leading spur from the east, and sidling around the side of the stark granite bluff which forms the highest point on the mountain, we got to the top, with some plants in the bag, in less than an hour and a half. Made the summit 1075 feet by aneroid.

A grand view from the summit, taking in all the country from the coast of Weymouth Bay to the north end of the Macrossan Range, and close by to the south and southwest the high country of the Tozer Range which we plan to get into to collect.

I climbed the granite outlier (unnamed) today chiefly to get a panoramic view of the high country into which George is cutting trail on a compass course based on the military map. George could have avoided some very rough going by taking the time to look

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at the country before starting to cut trail, but he is headed in the right direction and is making very good progress. We signalled each other about the middle of the morning.

The summit of the 1000 foot outlier carries a dense brushy forest dominated mainly by Tristania suaveolens and much entangled by wiry vines underneath. The vines chiefly a Smilax and Flagellaria indica var. minor. The crests and slopes of rocky bluffs carry an open tree-scrub of a Leptospermum (19346) which is one of the most beautiful trees I have ever seen. In its contorted shapeliness it resembles the dwarfed, pot-grown gx trees of the Japanese. Its thin, smooth bark is a soft shade of reddish-purple, and its greenish yellow wood is so very hard that the blade of my machete was all crinkled from cutting through it. This Leptospermum is the so-called "Smooth-barked turkey bush" of the lower country.

Showers which fell on the lower country of Iron Range during the day did not reach inland to the range, although one heavy one came as far as our camp, situated at about 300 feet elevation.

Thursday, July 1:

Yesterday George and his boy climbed the range again and cut more trail, reaching an elevation of about 1500 ft. Found good water at a place reported suitable for a camp site.

Today, with Willie, I climbed to the high places, followed all of George's cut trails, and cut trail from George's line to near the base of Mt. Tozer. Following are elaborated route notes. Altitudes are by aneroid. Two or more altitude readings were made at various points.

8 a.m. Left Tozer Gap Camp. Willie carrying, besides plant collecting gear, 5 cans meat, 2 billycans, quantity of tea and sugar; self an Egyptian cotton fly weighing 10 lbs. Barometer 350 ft.

8:10: Crossed stream where trail enters rainforest at start of climb. Running 4 ft. wide in rocky granite bed. Many fan and feather palms in forest. Alt. 350 ft.

8:25: Crossed dry rocky gully. True rainforest has replaced bastard growth of Tristania and Scleria. 475 ft.

8:45: Rest at 7:50 ft. Forest thinning; Tristania and Acacia again with true rainforest trees. Many pandans on rockier slopes.

8:50: On up steeper and rockier slope.

8:57: Stop at a rock lookout in rather open low scrub of red teatree, wattle, Casuarina, etc., with Cladium undergrowth. Alt. 950 ft.

9:10: On. Slope very steep and rocky.

9:15: Lookout from flat rock 1100 ft. A form of turkey bush scrub 6-10 ft. high, of black teatree, red teatree, wattle, red-barked Leptospermum, Casuarina and golden Grevillea, with pale yellow Hibbertia and Cladium undergrowth. Splendid view, but weather too thick for photos.

9:25: On.

9:30: Summit of main ridge of range. Low, dry type of rainforest 25 ft. high. Alt. 1250 ft.

9:45: Traveling through rainforest close under comb of the ridge, on west side, and reached junction of a spur trail leading down to water. Blazed tree marked

[illegible] country [illegible] trail, but [illegible] the right direction and in [illegible] very good [illegible] [illegible] other [illegible] ing.

The [illegible] at the 1000 foot [illegible] carries a dense brushy forest [illegible] by *Thiebie [illegible]* and [illegible] by [illegible] undergrowth. [illegible] *Smilax* and *Flagellaria indica* var. minor. The crests and slopes of rocky [illegible] an open tree-scrub of a Leptospermum (1086) which is one of the most beautiful trees I have ever seen. In its contorted [illegible] it resembles the dwarfed [illegible] trees of the Japanese. Its thin, smooth bark is a soft sheet of red [illegible]-purple, and its greenish yellow wood is so very hard that the blade of my machete was all [illegible] cutting through it. This Leptospermum is the so-called "[illegible]-barked [illegible]" of the lower country.

The [illegible] the lower country, of [illegible] the [illegible] interest [illegible] although one heavy [illegible] [illegible].

[illegible]

[illegible] again [illegible] [illegible] reported [illegible]

Today, with [illegible], I climbed to the high [illegible] all of [illegible] trails, and cut trail from [illegible] line to reach the base of [illegible]. [illegible] elaborated route notes. [illegible] The [illegible] readings were at various points.

8 a.m. Left Foster [illegible]. [illegible] carrying [illegible] collecting gear, [illegible], [illegible], quantity of [illegible] [illegible] cotton [illegible] ing [illegible]. Barometer [illegible] ft.

8:10: [illegible] stream [illegible] of [illegible]. [illegible] [illegible].

[illegible]: [illegible] [illegible] and *[illegible]*. [illegible]

[illegible]: [illegible] [illegible] forest [illegible] on [illegible].

[illegible]: On [illegible].

[illegible]: [illegible] of [illegible], [illegible], etc., [illegible].

[illegible]: [illegible].

[illegible]: [illegible] from [illegible] [illegible], [illegible] [illegible], *Pladium* [illegible]. [illegible].

[illegible]: [illegible].

[illegible]: Summit of [illegible] [illegible] of [illegible]. [illegible].

[illegible]: [illegible] on [illegible] of the ridge, on [illegible] side, and [illegible] of [illegible] trail [illegible].

"water" and arrow by George. Barometer 1200 ft.; 1220 ft.

Good running water in tree fern gully at 1150-1160 ft., 2 to 3 minutes down slope.

10:25: Left fly and food at marked tree and followed trail ca. south toward head of basin. (Forgot to bring my compass).

10:40: Trail branches at tree marked by George "Tozer Ridge" - "Lookout." Alt. 1430 ft.

Lookout at 1500 ft. on westerly turn of main ridge of range. Steep rocky slope covered dense low turkey bush of red and black teatree, Casuarina, pale yellow Hibbertia and Cladium.

Going beyond George's trail in turkey bush, could see main range continuing south and covered very dense woody vegetation, perhaps tall turkey bush. Alt. of range on southern continuation about 1600-1700 ft.

11:05: Started along trail leading approx. west in general direction of Mt. Tozer.

11:15: End of trail in dry rocky gully.

Started cutting, diagonally up-slope and more to the south, with object of gaining a bench seen from the 1000 ft. peak two days ago. George, in search for water, had got too far down the slope, and on to the beginning of very steep gradient dropping into the gorge that drains the basin.

Vegetation changed from poor rainforest to tall turkey bush about 100 yards from end of George's trail.

12:35: Stopped cutting at 1530 ft., having reached and crossed the flat bench at 1500 ft. End of trail on rocky point of a ridge in head-high Casuarina and Agonis turkey bush, parts of which have grown up after a years-old fire which probably came up from the dry country of the western slope of the range.

Unobstructed view of all the basin, the Janet Range to the north, and the peak of Mt. Tozer. Tozer peak rises from opposite side of a broad, apparently swampy stream bed carrying numerous pandan trees, about 100 ft. below my position; summit about 1/3rd mile NW by N.

?? 10 shot pam from S. end of Mt. Tozer to foot of Lloyd Bay.

12:55: Started back over cut trail.

12:57: Marked tree in gully where water was found on west edge of bench.

1:05: Back at end of George's trail. Alt. 1440 ft. Took 10 minutes to retrace steps on trail that took an hour and 20 minutes continuous cutting through the turkey bush.

1:10: Started back over George's trail.

1:15: Junction Tozer and Lookout trails, 1500 ft.

1:30: Reached marked tree where gear was left.

Chose camp site on a small flat ledge on trail. Alt. 1300-1320 ft. Lunched. Cleared place for fly, cut ridge pole, and placed fly and food on a stage above the reach of any dingo that might follow my tracks. Saw no sings of pig on top of range.

2:45: Left on return to Tozer Gap Camp. Collected on way down.

George did a good job in opening the route to the high parts of the range. My cutting brought us within east distance of Mt. Tozer. I also found abundant mammal signs, in the form of runways, in the dense turkey bush of the 1500 ft. bench. Both rainforest and turkey bush environments can be worked from the camp site chosen by George. Next we have to cut a trail from the 1500 ft. bench to the 1600 ft. crest of the rim ridge to the south, extending south from which the military air-survey map shows a rather extensive tract of country lying at 1600 to 1700 ft.

Pinwell drove up from Iron Range in his jeep and stayed the night.

Friday, July 2:

Van and Don, with packs weighing about 50 pounds, left at 8 am to start work at the 1300 ft. camp on the range. Van had in his pack mouse traps, rat traps and steel traps. They will camp two nights and return Sunday morning, when I will go up to the top camp. Van will cut trail to the summit of Mt. Tozer and report on what he sees to the south of the 1600 ft. rim ridge.

A bad turn in the weather. Mist on the range most of the morning, weather very sultry down at this level, raining tonight.

Finished work on specimens on hand and about the middle of the afternoon followed a trapping trail to the shallow rocky gorge of the West Claudie (Mishap Ck. of the old maps) about ½ mile NW of camp. Struck the gorge at the foot of a 60-80 ft. cascade, above which is a deep waterhole shaded by overhanging trees. Cypress pine (Callitris 19407) abundant on the sides of the gorge, in xerophytic tree growths in which the red-barked Leptospermum is the principal species. Callistemon occurs on rocky floodbanks. Back from the edge of the gorge the vegetation is rainforest.

Sat. July 3:

Mist clouds covering the top of the Tozer Range most of the day, coming from the SE. Light showers at this camp, getting heavier toward dark. Day completely overcast. And this the dry season in sunny North Queensland!

The weather must be severely hampering Van and Don at the 1300 ft. camp. Apparently it is general, for the people on a truck coming through from Wenlock to meet the boat at Portland Roads reported scuds of rain at Wenlock last night and along the road this morning.

The road busy today with the passage of two trucks going to Portland Roads. The first arrived soon after breakfast, after a night stop at Brown's Ck., with gold prospectors Le Bonne and Macdonald, and Mrs. Macdonald on board. Mrs. M. is going south for a holiday after two years at Wenlock. Of "Wee Hector" Macdonald it is said he is so thrifty that when feeding the chickens he chases the rooster away because he is "non-productive."

Le Bonne owns a boring plant with which he is about to start prospecting for gold at Wenlock - 4 inch percussion drill and sandpump. No boring has as yet been done on the field.

The second truck, driven by one of the Fisher boys, with two of their "Black Cat" mine employees and their wives and children on board for a vacation ride to the coast, arrived about noon and I met it on the road where I was collecting ½ mile to the west of camp. Geoff, with a carton of herbarium material in his charge, left on the Fisher truck to attend to incoming stores at Portland Roads.

An accumulation of undried specimens kept me in camp most of the morning. Later I went west to a patch of Agonis scrub in the Gap to do general collecting, and get Hibbertia material for anatomical study by Prof. Bailey of Harvard, and gather a quantity of Boronia sp. for analysis by Webb of the CSIR. Spot testing by Webb in the Queensland herbarium of B. alulata from the Dulhunty River shows it a very promising plant for

alkaloids. Webb, with touching faith in my knowledge of the northern flora, has asked me to send him material of the species. The only Boronia I have found on the Peninsula grows here in Tozer Gap, so today I gathered plants of it which I hope will weigh 5 lbs. when dry.

Sent with Geoff, for air freighting to the Museum and on to Rochester for processing, 7 kodochrome films. Have given the Kodak processing plant at Melbourne a fair trial with 35 mm. kodachromes and found them most unsatisfactory. They seem to be having trouble with their dyes. The films come back marred by scratches, violet lines and flecks, thumb-prints, and ingrained dust.

Sunday, July 4:

A run of outs for us. Van and Don returned to camp with only two birds to show for two days and two nights on the mountain. They had bad weather all the time, but that was not the real trouble. The trouble was a plague of white-kneed crickets which ate the bait off the traps. Apparently the mountain fairly crawled with them at night. Traps set near camp were rebaited three and four times in an evening, only to be sprung again by the crickets gathering to eat the bait. Jacking along the trails was impossible owing to mist. The boys did, however, cut trail to the summit of Mt. Tozer, and from there got a momentary glimpse of the high country to the south, which they describe as rolling ridges covered with turkey bush. Their traps were all set in rainforest and on in the turkey bush of the east slope of the range, adjacent to rainforest. No traps were set in the turkey bush where I saw all the runways. It remains to be seen whether the cricks occur in the real turkey bush country.

The second bit of bad news concerned the "Wandana," or rather the cargo of ours which was supposed to be on this ship. She got to Portland Roads last night with only a few perishables, which was all the cargo the Cairns wharf-lumpers would load. The weather was wet and they would not touch general cargo. The only item on the ship for us was a crate of cabbages.

I first got the news from Hector Macdonald and Le Bonne as, the weather having lifted a bit, I collected east down the road after lunch. Wee Hector was especially violent in his denunciation of the wharfies, and having let off steam, he rummaged under the tarp on the back of the truck and produced a fine orange and a tangerine from a case that had arrived on the ship.

Late in the day Geoff arrived on the Fisher truck bound back for Wenlock, with a ham and a side of bacon, some butter, and a few odds and ends of stores bought from the ship and from Doug. Fisher's store. We have plenty of essential rations on hand. A small vessel of John Burke's, the Geisha, will bring on from Cairns the cargo which should have been on the Wandana, and is due at P.R. on Thursday.

Norman Fisher and his passengers, Mr. and Mrs. Nancurvess and children, and Mr. & Mrs. Uylett, stayed the night with us, contributing to the fare a pig they had shot along the road.

During the afternoon High Fisher, with Constable Jerry of Coen, called in on their way to P.R. and Iron Range. Made arrangements with Fisher to transport us to Wenlock on the 22nd. For taxi hire of his 4 x 4 truck Fisher charges L.10 for the round trip Wenlock to P.R.; for loading the charge is L.7 per ton. Fisher will also take us on to Coen from Wenlock.

Monday, July 5:

Again postponed my trip up the mountain owing to foul weather. This is our third successive day of rain - not much rain, but enough to interfere with collecting and cause some

[illegible]

[illegible]

[illegible]

discomfort through clothing which will not dry. I have had clothing on the line for three days. Things are going mouldy in my tent.

Worked down the road to the south branch of the West Claudie, thence down to the main stream and up along it to the waterfall ½ mile or so from camp. Forests very wet, and visibility bad. Plants taken mostly from the ground and close to it, including several ferns and orchids new to the collection. The prize for the day was a magnificent Hoya (19447) with great blackish purple, gardenia-scented flowers 8 to 8.5 cm. in diameter. Have given Don Vernon some cuttings to grow in his greenhouse in Brisbane.

July 6 & 7: Trip to Mt. Tozer

Leaving plants to dry in care of the cook, Willie andI left Tozer Gap Camp at 8:40 on the 6th with packs weighing between 25 and 30 lbs. Geoff, waiting for bread to cook, left about an hour later.

Mist on the range top in early morning, followed by a rainless partly cloudy day. First day without rain since the 2nd.

At 10:15 Willie and I arrived at the camp on Tozer Range. Alt. by aneroid 1230 ft. (300 ft. at Tozer Gap Camp). Trail a bit slippery in the rainforest; good elsewhere. Moisture rising from the ground formed into patches of fog in the rainforest on top of the range. Saturated dead sticks falling from the trees in surprising numbers.

Found that Van and Don had made a good job of making camp. Fly well rigged, beds of treefern fronds, pata-patas to keep stores above ground, and a good stock of dry wood under cover. But bedding left hanging from the ridgepole was demp and stinking, and Van's sleeping bag, which was to be my bed, was whiskery with grey mould. In order to ease the transport problem, bedding and cooking gear had been left by the first party to collect on the range.

Had lunch before starting to collect in the rainforests of the gullies and ridges within east distance of the camp. Forest poor in species and the only big tree is apparently a species of Xanthostemon with soft brownish bark and a trunk up to about 2 ft. in diameter. The tallest of these scattered big trees only about 60 ft. high. Prominent among the smaller trees that make up the bulk of the forest is a long-leaved Podocarpus (19458); the undergrowth, entirely woody except for a Dianella and a few ferns, is largely Euphorb. 19462. On wet granite boulders in a gully I found the smallest fern I have ever come across - Hymenophyllaceae 19460, with simple leaves looking like little green fish scales, and only 4 to 5 mm. long. Only a small amount of moss on the grees, and none on the ground. The one touch of luxuriance is supplied by a slender treefern (collected on my first visit) which abounds in the gullies.

At 4:30 when I returned to camp, the aneroid stood at 1300 ft.

Built a good fire with logs brought in by Willie and hung the bedding near it before I started out to set a few of the 100-odd mammal traps left by Van. Had noticed a good site for the steel trap under a rock, and I also put out several rat traps, baited with corned beef and bits of a cake that Joe had baked. I expected the mountain to be crawling with crickets, as it was when Van and Don were there a few days earlier. There were a few chirpings about 6 o'clock, but no crickets appeared in camp, or came to Geoff's bug-trap, hung under a lamp about fifty yards off in the forest. Put out 10 more traps, close around camp, to see what would happen to the bait. Found in the morning that all traps but one had been de-baited, but not one trap was sprung by cricket or mammal. The traps, I might say, were badly rusted, and hard to spring.

By hunting alont the trail with a headlamp, Geoff collected several spiders seemingly different from species taken at Tozer Gap Camp, 1000 ft. below. A few micros and some larger moths were taken at the trap lamp. I took a walk with gun and lamp looking for mammals. Not a mammal, or a cricket, was seen by either of us. Tozer Range is no paradise for a biologist.

At daybreak I awoke to find Willie asleep by the fire outside the fly, and water dripping off the leaves from mist driving through the treetops. Took up traps while Geoff cooked breakfast, that is, boiled the tea billy and opened a can of corned beef. Was sorry I had not gone on yesterday and climbed Mt. Tozer, but I thought then we were in for a spell of good weather, and I guessed wrong.

July 6 - 7: Trip to Mt. Toser

Leaving plenty to dry in care of the cook, Willie and I left Toser Campground at 8:40 on the 6th with packs weighing between 75 and 80 lbs. Geoff, waiting for bread to cool, left about an hour later.

Mist on the range top in early morning, followed by a reinforce partly cloudy day. First day without rain since the 2nd.

At 10:15 Willie and I arrived at the camp on Toser Range. Alt. by aneroid 1250 ft. (850 ft. at Toser Dry Camp). Trail a bit slippery in the reinforcers; good elsewhere. Moisture rising from the ground formed into patches of fog in the reinforcers on top of the range. Saturated dead sticks falling from the trees in surprising number.

Found that Van and Jon had made a good job of making camp. Fly well rigged, beds of treefern fronds, pots-poles to keep stores above ground, and a good stock of dry wood under cover. Hot bedding left hanging from the ridgepole was damp and stinking, and Van's sleeping bag, which was to be my bed, was whiskery with grey mould. In order to save the transport problem, bedding and cooking gear had been left by the first party to collect on the range.

Had lunch before starting to collect in the reinforcers of the gullies and ridges within easy distance of the camp. Forest poor in species and the only big tree is apparently a species of Xanthostemon with soft brownish bark and a trunk up to about 1 ft. in diameter. The tallest of these scattered big trees only about 60 ft. high. Prominent among the smaller trees that make up the bulk of the forest is a long-leaved Podocarpus (Ins.Sp); the under growth, entirely mossy except for a Dimelia and a few ferns, is largely Pandoro. Ins.Sp. On wet granite boulders in a gully I found the smallest fern I have ever come across - Hymenophyllaceae Ins.Sp., with single leaves looking like little green fish scales, and only 4 to 5 mm. long. Only a small amount of moss on the ground, and none on the ground. The one touch of luxuriance is supplied by a slender treefern (collected on my first visit) which abound in the gullies.

At 4:30 when I returned to camp, the aneroid stood at 1500 ft.

Built a good fire with logs brought in by Willie and Jon; the bigger next it before I started out to set a few of the 100-odd mammal traps left by Van. Had noticed a good site for the steel trap under a rock, and I also put out several rat traps, baited with corned beef and bits of a cake that Joe had baked. I expected the mountain to be crawling with crickets, as it was when Van and Jon were there a few days earlier. There were a few chirpings about 6 o'clock, but no crickets appeared in camp, or came to Geoff's bug-trap, hung under a lamp about fifty yards off in the forest. Jon put 10 more traps, close around camp, to see what would happen to the bait. Found in the morning that all traps out one had been re-baited, but not one trap was springs by crickets or mammal. The traps, I might say, were badly rusted, and hard to spring.

By hunting about the trail with a bushlamp, Geoff collected several spiders, especially different from species taken at Toser Dry Camp, 1000 ft. below. A few mites and some larger mites were taken at the trap lamp. I took a walk with gun and lamp looking for mammals. Not a mammal, or a cricket, was seen by either of us. Toser Range is no paradise for a biologist.

At daybreak I awoke to find Willie asleep by the fire outside the fly, and water dripping off the leaves from mist driving through the treetops. Took up traps while Geoff cooked breakfast, that is, boiled the tea billy and opened a can of corned beef. Was sorry I had not gone on yesterday and climbed Mt. Toser. But I thought then we were in for a spell of good weather, and I guessed wrong.

At 8 o'clock the three of us set out in the mist to follow the cut trail to the top of the mountain. Could not see a thing but the dripping trees and underbrush around us, and by the time we reached the end of my trail and followed Van's trail down into the Pandanus gully at the foot of the mountain, were pretty thoroughly wet. Decided to collect in the gully in the hope that later on the mist would lift or blow off, but at 9 o'clock rain began to fall, and we went on up the mountain.

The whole of the ascent of Mt. Tozer, from 1350 ft. in the Pandanus gully to 1784 ft. on the summit, was through "turkey bush" scrub of Casuarina, etc., with here and there a sloping face of almost bare granite with low shrubs and orchids in the crevices and sundews and several species of Utricularia on little accumulations of moist sand. The turkey bush was generally about waist high, stiff-growing, and small-leaved.

Collecting a few plants on the way, I reached the cairn of stones and the trig pole on top of the mountain about 10 o'clock. Geoff was there ahead of me, and had collected a small lizard from under a scaled-off slab of rock - probably the first zoological specimen to be taken on the mountain.

The trig station was set up by a military survey party during the war. That party must have climbed the peak from the northwest side. Saw where brush and small trees had been cut on top, but found no trace of a camp and no cut trail.

For an hour of plant hunting in mist and rain, and shins made sore by pushing through the stiff shrubbery, I found a bare half-dozen species new to the collection. Two interesting "new" shrubs were Rutaceae 19483 and a Prostanthera which looks very much like P. Brassii which I discovered on Mt. Demi in 1932. A new orchid with pretty white-scented flowers and reddish fluted pseudo bulbs was plentiful on exposed rocks. Saw only 2 mosses, both sterile.

The characteristic, and prabtically the only species of the shubberies on top of Mt. Tozer, occur in plenty within half a mile of Tozer Gap base camp, and at the same level: Casuarina, red teatree, black teatree, Agonis, red-barked Leptospermum, Grevillea chrysodendron, and in the undergrowth pale yellow Hibbertia, Boronia, Cladium and red-seeded Gahnia. A form of Mel. leucadendron (19477) seems identical with one found previously on the sand dunes of Newcastle Bay.

Momentary breaks in the mist gave me glimpses of an area of high country to the southeast of Mt. Tozer which is shown on the military map as an extensive plateau lying at 1600-1700 ft. elevation. The high country is there, but it is a jumble of granite hills covered mainly with fire-killed turkey bush, with bits of rainforest in gullies down the west slopes. Most unattractive country, and not worth cutting trail into.

Abandoning hope of a decent view and panoramic photos, we started down the mountain at 11:30, and ten minuteslater the cloud field broke wide open, the sun shone, and we could see to the south end of the Tozer range, far out over hilly country to the west,and down to the sea. But we were too far down the mountain to see the 1600-1700 ft. plateau of the maps. Shot black & white, and color pams before the mist closed down and the drizzle started again.

At the Pandanus gully we met George and his boy Roy, looking for sites for steel traps. They had come up from Tozer Gap during the morning prepared to camp two nights.

With Geoff and Willie left the 1300 foot camp around 3:30 and arrived at Tozer Gap Camp about 4:45. Unless something worthwhile turns up in the mammal line, George and his boy will return to the base on Friday, with he assistance of Geoff and Willie to carry camp gear and traps. George will make a smoke fire signal if he wants to extend his stay and in that event, more food will be sent up on Friday and his catch brought down to the base for skinning. He has with him formalin for injection of mammals caught and with that they will keep safely for a couple of days.

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The characteristic, and practically the only species of the shrubberies on top of Mt. Toser, occur in plenty within half a mile of Toser Gap base camp, and at the same level: Casuarina, red banksia, black beefwood, Alpinia, red-barked Eucalyptus, Grevillea leucopteridon, red banksia, and in the undergrowth pale yellow Hibbertia, Boronia, Dianella and red-seeded dianella. A form of Ant. Leucadendron (1947) seems identical with one found previously on the sand dunes of Newcastle Bay.

Momentary breaks in the mist gave me glimpses of an area of high country to the southeast of Mt. Toser which is shown on the military map as an extensive plateau lying at 1800-1700 ft. elevation. The high country is there, but it is a jumble of granite hills covered mainly with fire-killed turkey bush, with bits of reinforest in gullies down the west slopes. Most unattractive country, and not worth cutting trail into.

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Thursday, July 8:

In camp all day preparing specimens from the range. The trip yielded me 42 species all told.

Van and Moreton with about 150 traps out got but one mammal (Uromys) last night. Mammal results at this camp have been most meager. A fine male spotted cus-cus shot by Moreton today brings total mammal take for the camp to 35 specimens for 10 days. Mammal signs, especially small rootings as of bandicott, are abundant in the rainforests, but the creature that makes them has not been caught. Not a single mammal has been taken by jacking. Like Moreton, who says "Plenty mark all about, but trap can't take 'im," I find it hard to understand.

Friday, July 9:

Sent Willie to the top camp with Geoff to help carry everything back to the base and myself collected mainly "turkey bush" elements west along the Wenlock road about 1½ miles. My gatherings mainly things of which I need series or records for the locality Only two plants new to the collection - an Acacia with very large flat pods recalling A. Peuce, and a vine of the Menispermaceae. The latter (19504) has slender brown stems thin and almost as tough as wire, and it is an awful curse, entangling one's feet, in the turkey bush of the range and in the bastard rainforest of the slopes.

George, for his two nights of trapping at about 1300 ft. on the range, caught 6 Melomys of the small species already taken here and at Iron Range. These rats were taken at the Pandanus gully in the turkey bush. Last night his traps were raided by crickets, as were Van's last week. Last night was rainy on the range. Wednesday night was without rain and the crickets did not appear. The sum of all our observations points to a relationship between wet nights and the appearance of large numbers of crickets on the range. Between us we have camped five nights on top of the range. Three nights were rainy, and white-kneed crickets (not true crickets - they have an erect ovipositor) swarmed on the ground. On two fine nights, no crickets were seen. Observations of both Van and George indicate that the crickets eat their own kind. Traps set by George were milested by crickets only in rainforest and in turkey bush up to about 20 yards from rainforest. In the Pandanus gully, far out in the turkey bush, at the foot of Mt. Tozer, there was no evidence of activity by crickets and the only traps sprung were those that caught mammals. George devised a guard of metal to protect the bait on his traps, but of course the guards could not prevent the crickets from springing the traps in efforts to get at the bait.

The return of George today ends our work on the top of Tozer Range. Extended trapping in good weather might yield mammals that have not been taken at the lower elevations, but the weather remains unsettled and overcast with mist and showers up top, and may well continue so for months throughout this extraordinary southeast season.

On the range Roy the blackboy picked up a few leeches on his bare legs, and others of us found them on our clothing. George has a slight infection from leech bites on one of his legs. This is the first time that leeches have been at all troublesome on the Peninsula. Only a very few were noticed at Iron Range, where most of our work was in rainforest, in showery weather. We saw none at all north of the Jardine. Scrub itch (Trebicula) is entirely absent from these northern parts of the Peninsula, as far as we know. These two pests, leeches and scrub itch, make life miserable in the rainforests father south in Queensland, and throughout New Guinea.

Sat. July 10:

A fine day with strong southeast wind and broken high cloud. All clothes lines in camp - and it has been necessary for every man to rig one - full of trousers and shirts and sundries, as well as blankets and sleeping bags. Cameras have been clicking too. The weather has been bad for photography and for cameras. Camera cases and gun slings have rotted with the constant moisture in the tents and frequent wetting in the field.

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July 10 (Cont'd)

Examined the rainforest on the west side of Puffdelooney Peak and found them poor indeed, and much encumbered with wiry vines.

Sunday, July 11:

Most of my morning spent making 4 x 5 photos of the camp and of the gorge of the West Claudie. Fine gusty day, with more cloud than yesterday but good patches of sunshine for photos.

Hugh Fisher and George Wilson had lunch with us on their way to Iron Range, to pull down a military building, and to Portland Roads to do some fishing. Brought us a nice lot of fresh and corned beef from Wenlock where a Maltese does the butchering for the community.

We expected that Fisher would have radio or telephone news of the Leisha which is bringing the cargo that the wharfies refused to load on the Wandana. But the telephone line between Portland Rds. and Wenlock is out of order, as usual, and there is no news of the boat. We expected Charlie Taylor (Wharfkeeper at P.R.) to drive up to our camp yesterday or today with our cargo ex the Leisha, but he has not arrived. The boat must have been delayed. We are out of rum and tomorrow we will eat the last of our butter. We can, however, carry on very well for some time except for kerosene. We have only enough kerosene left to supply my plant dryers for a week, and to run one lamp for the whole camp for that time. Fuel consumption has been above normal for this camp. Not having enough work to make them tired, the zoological staff has been sitting up late reading blood and thunder and myster yarns.

This camp has been fairly good for plants and insects, excellent for birds, and very poor for mammals. Only ____ mammals, of _____ species, have been taken in two weeks. Think trapping techniques have a lot to do with the poor results in mammals. For example, two nights ago Van discovered how to trap the local marsupial cat (Saturnellus). Now we have three specimens of it.

Monday, July 12:

Tonight we are at Brown's Creek, with different insect noises and the soft sound of running water in our ears. The creek runs strongly all year from a big spring up a little from the road crossing where we are camped. Brown's Creek runs into the Pascoe, and is 12 miles southwest of our camp in Tozer Gap. Most of the country in the locality is covered with turkey bush. We are camping here for a week to try out the turkey bush environment. This type of vegetation occupies vast areas between here and the Jardine River, but it does not extend much farther south, according to reports.

The move here was done on a Main Roads truck driven by George Moon. Left the Gap at 9:30 and arrived at Brown's Creek about 11:15. And we had no trouble on the road. Travel is just slow on these roads.

Because of its running water, Brown's Ck. is a favored camp site for travelers on this lonely road. We had only to clear the ground of grass before stretching our tents and flys on poles left in position by former users of the camp. A galley with galvanized roof was ready for the cook, who soon made his favorite kind of fireplace out of a 50 gallon gasoline drum that someone had left behind. A sheet of corrugated iron, placed on a frame of sticks, and the corrugations filled with clean sand from the creek, serves as our dining table.

Tuesday, July 13:

The first night of mammal collecting gave encouraging results - a Pteropus Gouldi shot out of a flowering bloodwood tree by Van (it is supposed to be a species of the mangroves), a Rattus trapped by Van and two Saturnellus trapped by George.

Examined the rainforest on the west side of Fortlandsbaai Peak and found them poor indeed, and much encumbered with wiry vines.

Sunday, July 11:

Most of my morning spent making 4 x 5 photos of the camp and of the gorge of the West Claudie. Fine gusty day, with more cloud than yesterday but good patches of sunshine for photos.

Hugh Fisher and George Wilson had lunch with us on their way to Iron Range, to pull down a military building, and to Fortland Roads to do some fishing. Brought us a nice lot of fresh and corned beef from Tenlook where a Maltese does the butchering for the community.

We expected that Fisher would have radio or telephone news of the launch which is bringing the cargo that the whirlies refused to load on the Mandane. But the telephone line between Portland Rds. and Weipa is out of order, as usual, and there is no news of the boat. We expected Charlie Taylor (Wharfkeeper at P.R.) to drive up to our camp yesterday or today with our cargo ex the launch, but he has not arrived. The boat must have been delayed. We are out of rum and tomorrow we will eat the last of our butter. We can, however, carry on very well for some time except for kerosene. We have only enough kerosene left to supply my plant dryers for a week, and to run one lamp for the whole camp for that time. Poor consumption has been above normal for this camp. Not having enough work to make them tired, the zoological staff has been sitting up late reading blood and thunder and mystery yarns.

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Monday, July 12:

Tonight we are at Brown's Creek, with different insect noises and the soft sound of running water in our ears. The creek runs strongly all year from a big spring up a little from the road crossing where we are camped. Brown's Creek runs into the Pascoe, and is 12 miles southwest of our camp in Tozer Gap. Most of the country in the locality is covered with tuckey bush. We are camping here for a week to try out the tuckey bush environment. This type of vegetation occupies vast areas between here and the Jardine River, but it does not extend much farther south, according to reports.

The move here was done on a Main Roads truck driven by George Moon. Left the Gap at 9:30 and arrived at Brown's Creek about 11:15. Also we had no trouble on the road. Travel is just slow on these roads.

Because of its running water, Brown's Ck. is a favored camp site for travelers on this lonely road. We had only to clear the ground of grass before stretching our tents and flys on poles left in position by former users of the camp. A galley with galvanised roof was ready for the cook, who soon made his favorite kind of fireplace out of a 50 gallon gasoline drum that someone had left behind. A sheet of corrugated iron, placed on a frame of sticks, and the corrugations filled with clean sand from the creek, serves as our dining table.

Tuesday, July 13:

The first night of mammal collecting gave encouraging results - a Petaurus breviceps shot out of a flowering bloodwood tree by Van (it is supposed to be a species of the mangroves), a Bettongia trapped by Van and two Dasyurus trapped by George.

Tues. July 13 (Cont'd)

Following the creek down for perhaps half a mile, I collected a big lot of plants (33 numbers, 224 sheets) from brushy forest in the floodbed, small billabong waterholes in a flood channel, and Agonis scrub and Leptospermum scrub on dry country back from the creek. Most of the plants were familiar species collected in other localities. The Leptospermum scrub of small "Japanesie" trees contains several tree spp. which I have not collected, but all are sterile.

Hugh Fisher, passing through on his return to Wenlock, brought a 5 gal. drum of kerosene kindly loaned by the men of the Main Roads camp. With that, the stores position is safe for this camp. A goat en route New Guinea brought word to P.R. yesterday that the Leisha had left Cooktown northward bound. There is also news that our old friend the "Lochiel" caught fire from an explosion on board and was scuttled in 30 ft. of water near the Flinders Group. That leaves all freighting along the coast in the hands of John Burke.

Wed. July 14:

Overcast, showery weather hasfollowed us from Tozer Gap. Today we have not seen the sun. A gusty southeaster blows, the grass is wet, water drips from the trees in a tatboo on our tents, but the ground is dust-dry.

Having room for only a hundred sets of plants today, I spent the morning in the dry hills a little west of north from camp. The prevailing vegetation is turkey bush of Agonis lysisepala, growing to about 4 to 7 ft. high on dry sandy grey soil. The Agonis scrub is developed level-topped ridges, scarped in low purplish bluffs in which a fine-grained conglomerate, carrying white quartz pebbles, outcrops. The higher ridges of the area rising above the Agonis ridges are of rotten, reddish-brown granite. The beautiful Japanesie Leptospermum forms patches of low-tree scrub on the granite hills where rock lies exposed, and on the points of the conglomerate bluffs. Great termite mounds, grey or yellowish, are a conspicuous feature of the Agonis scrub.

Sunday, July 18:

Night work on collections has allowed me no time for writing since the middle of the week. Collections have piled up. Not counting a few spp. gathered today while making 4 x 5 photos between showers, I have for five days at this camp 118 numbers, 804 sheets.

The camp has been good for insects and reptiles, and for birds, and four spp. of fish have been taken from the creek by netting and by shooting with a .303 rifle. But mammal collecting has been poor. Two very good mammals have turned up, however. These are the queer rodent Mesembryomys (not represented in the Museum collections) and a white bellied Taphyzeus bat.

The overcast showery weather continues through the daylight hours, although nights are fine. Last night was typical. Waking about one o'clock, I heard the loud quarrelsome noise of fruitbats and got up to investigate. A thin, sharp breeze was coming out of the southeast. High white whisps of cloud scudded across a bright moon, and the night was full of subdued sound. Frogs down in the creek. Crickets out in the timber. Now and then the shooshing sweep of a fruitbat's wings as it shifted its feeding place in the flowering teatrees on the banks of the stream. Rousing Van, we went down with guns and added another Pteropus Gouldi to the collection.

Friday night we had as guests George Nancurviss and Luke Wilson, bound by truck from Wenlock to P.R. to get stores which arrived from Cairns two days earlier. They brought with them a fine roan wallaroo which they had shot as they crossed the Sir William Thompson Range. They also had a very dead marsupial cat, contributed by a miner at Wenlock; a live bowerbird for Don, and a snake for Geoff.

Tues. July 15 (Cont'd)

Following the creek down for perhaps half a mile, I collected a big lot of plants (55 numbers, 224 sheets) from brushy forest in the floodbed, small billabong waterholes in a flood channel, and Leptospermum scrub and Leptospermum scrub on dry country back from the creek. Most of the plants were familiar species collected in other localities. The Leptospermum scrub of small "Japanese" trees contains several tree sp. which I have not collected, but all are sterile.

Hugh Fisher, passing through on his return to Wenlock, brought a 5 gal. drum of kerosene kindly loaned by the men of the Main Roads camp. With that, the stores position is safe for this camp. A goat en route Mm Daines brought word to P.R. yesterday that the Leichs had left Cooktown northward bound. There is also news that our old friend the "Doctal" caught fire from an explosion on board and was scuttled in 30 ft. of water near the Flinders Group. That leaves all freighting along the coast in the hands of John Burke.

Wed. July 16:

Overcast, showery weather heralded us from Forest Day. Today we have not seen the sun. A gusty southeasterly blows, the grass is wet, water drips from the trees in a tattoo on our tents, but the ground is dust-dry.

Having room for only a hundred sets of plants today, I spent the morning in the dry hills a little west of north from camp. The prevailing vegetation is turkey bush of Acacia lysiosperma, growing to about 4 to 7 ft. high on dry sandy grey soil. The Agonis scrub is developed level-topped ridges, occupies in for graphic bluffs in which a fine-grained conglomerate, carrying white quartz pebbles, outcrops. The higher ridges of the area rising above the Agonis ridges are of rotten, reddish-brown granite. The beautiful Leucopogon Forms patches of low-tree scrub on the granite hills where rock has exposed, and on the slopes of the conglomerate bluff. Giant termite mounds, grey or yellowish, are a conspicuous feature of the Agonis scrub.

Sunday, July 18:

Night work on collections has allowed me no time for writing since the middle of the week. Collections have piled up. Not counting a few spp. gathered today while waiting 4 x 5 photos between showers, I have for five days at this camp 118 numbers, 304 sheets.

The camp has been good for insects and reptiles, and for birds, and four spp. of fish have been taken from the creek by netting, and by shooting with a .30 rifle. But mammal collecting has been poor. Two very good mammals have turned up, however. These are the rarer rodent Mesembryomys (not represented in the Museum collections) and a white bellied Dasyurus cat.

The overcast showery weather continues through the daylight hours, although nights are fine. Last night was typical. Waking about one o'clock, I heard the loud guttural-some noise of fruitbats and got up to investigate. A thin, sharp breeze was coming out of the southeast. High white wisps of cloud scudded across a bright moon, and the night was full of subdued sound. Frogs down in the creek. Crickets out in the timber. Now and then the shooting sweep of a fruitbat's wings as it shifted its feeding place in the flowering bauhinias on the banks of the stream. Musing then, we went down with guns and added another Pteropus poliocephalus to the collection.

Friday night we had as guests George Dancervics and Luke Wilson, bound by truck from Wenlock to P.R. to get stores which arrived from Daines two days earlier. They brought with them a fine roan wallaroo which they had shot as they crossed the Mt. William Thompson Range. They also had a very dead marsupial cat, contributed by a miner at Wenlock; a live bowerbird for Don, and a snake for Geoff.

Nancurviss and Wilson lunched with us today on their way home. They brought news that our supplies had arrived at F.R., and that the Main Roads truck would be here this evening to take us back to Iron Range tomorrow. But the road through the rainforests was very wet and slippery and the truck has not arrived. There is also a phone message from Hugh Fisher to the effect that he has been delayed south of Coen and cannot be at Iron Range to pick us up until the 23rd - one day late.

Sent Van on to Wenlock with Moreton to start collecting while we are at Iron Range packing specimens for shipment and reorganizing.

The Brown's Creek country has yielded good collections of plants from the moist creek banks. Some very interesting plants occur in the messmate and messmate-bloodwood savanna forests, and a big quaking bog, several acres in area has added variety, and one or two surprises to the collection. One remarkable bog plant is a sedge (aff. Cladium) with rigid thick needle-tipped leaves about 2 feet long which are a positive danger to one's eyes when stooping to dig up the little bladderworts and sundews and eriocaulons which abound in the bog.

Growing in the bog I found two species of orchids (19561 and 19646) which dubtless are epiphytes come down to live on the ground, and I think New Guinea epiphytes at that. They look like mountain orchids of the New Guinea mossy forests.

The "turkey bush," from which I expected numbers of new things for the collection, was disappointing. Only small patches of it, on bluffs and rocky spots too bare to carry fire, have not been burnt over, as recently perhaps as last year. Agonis and accompanying minor dominants have grown tall shoots - head high or more - from the base, but most of the smaller plants, if many exist in this community, have disappeared for the time being. Most of the twigs have fallen from the fire-damaged shrubs, and their stems can be pushed over with one foot. I should like to have seen this bit of country before our friend Jack Gordon prospected through it last year. Burning of the country by prospectors is regular procedure. The fires leave the ground bare and expose any rock that may be outcropping. It also makes travel easy through the turkey bush, until the next man comes along and has the dead sticks as well as the vigorous regrowths to contend with.

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Thursday, July 22:

The Main Roads truck turned up at our Brown's Ck. camp about 12:30 on the 19th and the trip back to our old quarters at Iron Range was done in about 2¼ hours. The road through the rainforest was slippery with rain and in one place almost closed by the rootings of pigs, and twice in the rainforest all hands had to jump off the truck and push. The moist coolness of the rainforest as we drove through was pleasant after the harsher touch of the air at Brown's Creek, on the dry side of the range.

For two days I have been packing specimens, sorting stores, and catching up with arrears in correspondence. Today we have sent to Portland Roads for shipment to Cairns 29 boxes and packages, some of them containing surplus supplies which will be transshipped to Cooktown.

The mail, in this morning by the plane, running a day late, brought news that we have bookings for return to the U.S., from Brisbane or Sydney direct to New York, on the "Pioneer Star." Marie, who has been scouting around in Brisbane, had also secured bookings on the mail boat "Aorangi," sailing from Sydney to Vancouver on Oct. 21, but the cost of going by that route would be 7 to 8 hundred dollars more than direct to New York, and we have to consider that. The "Pioneer Star" is expected to sail from Brisbane or Sydney about the middle of October. We are closing for bookings on her.

When we were working this Iron Range locality systematically with large numbers of traps, mammals were by no means easy to come by. Having some time on his hands during this short visit, George has set a few steel traps and in two nights seven specimens have been taken. And, surprisingly, no less than three spiny anteaters have been picked up here and there. Apparently this is a walkabout time for spiny anteaters. George found one this morning, dug in beside one of his steel traps. The trap had been sprung, seemingly by the beast, which must have got a scare and dug himself a hole to hide in.

Hugh Fisher has sent word by wire that he cannot be here before tonight or early tomorrow morning for the move to Wenlock.

Friday, July 23:

And still at Iron Range. By unofficial telephone - a field phone hooked onto the line by Connell, who lives in the other end of the old army buildings we are camped in - we learn that Hugh Fisher's truck has broken down in Coen and that his brother Norman is leaving Wenlock this afternoon to pick us up. That will mean we leave here tomorrow morning, if Norman arrives. Another day lost. Judging from our experience on this trip, with strikes and other transport delays, one should allow 25% extra time for any job of work planned in this country.

The day, however, was not entirely lost to me. Spent several hours in the rainforests and collected nine spp. of plants, including 7 new to the collection. A sprinkling of forest trees has come into flower since we moved out of here three weeks ago, and flowers of other spp. will be opening soon.

We learn over the phone that Van is doing well with kangaroos, etc. at Wenlock.

Sat. July 24:

The truck from Wenlock with Norman Fisher and Arthur Ullet on board, and towing a trailer, arrived after 11 o'clock last night. This morning the alarm was set for 4:30, breakfast was over and we had everything loaded before daylight. at 6:20 we moved off in the grey dawn bound for Wenlock.

Driving too fast for the road, Norman had us at Brown's Creek in 2¼ hours, where we loaded the gear left there, took down the covering fly, and were on the road again by 10 o'clock. Reached the crossing of the Pascoe River about 11:30, where we stopped to boil the billy. We felt like eating a good lunch, but found that the cook, who had

Thursday, July 22:

The Main Roads truck turned up at our Brown's Ck. camp about 12:30 on the 17th and the trip back to our old quarters at Iron Range was done in about 2½ hours. The road through the rainforest was slippery with rain and in one place almost closed by the roofings of pigs, and twice in the rainforest all hands had to jump off the truck and push. The moist coolness of the rainforest as we drove through was pleasant after the harsher touch of the air at Brown's Creek, or the dry side of the range.

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Driving too fast for the road, Norman had us at Brown's Creek in 2½ hours, where we loaded the gear left there, took down the covering fly, and were on the road again by 10 o'clock. Reached the crossing of the Pascoe River about 11:30, where we stopped to boil the billy. We felt like eating a good lunch, but found that the cook, who had

Sat. July 24 (Cont'd)

been getting drink at Iron Range and had not been properly sober for days, had no cooked food in the tucker box. However, we boiled the billy and ate a cake which the driver had with him.

The Pascoe entrenched between high banks and running a clear stream 8 to ten yds. wide and about a foot deep on a sandy bootom at the crossing. Big waterworn rocks, dark in color and looking like granite, outcrop in the river bed. The road crossing is made of this rock, retained by logs on the downstream side. A coarse conglomerate - flat-bedded - is exposed where the road climbs up the south bank of the river.

Above the crossing the hills narrow in to the river and the river, in its narrow valley, can be seen to curve in a northerly direction. Was not much impressed with botanical prospects at the crossing. Lines or rainforest trees occur within the cut banks of the river. Rainforest of sorts covers parts of the hills above the crossing, especially on the north side.

From about the One-mile Creek, the road runs close under the western edge of the broad block of mountains of which the Tozer Range is a part, and the country changes from generally sandy to harger ridges, in parts rocky. Ironbark, box, and poplar gum enter the composition of the savanna-forest. Cochlospermum without leaves but sprinkled over with big yellow flowers, becomes abundant on the edges of dry gullies.

Beyond the Pascoe is a small stretch of sandy country from which one soon begins a rough climb up the slopes of the Sir William Thomson Range (a section of the Main Divide). The range is of granite. Dry country with open savanna forest of small box, ironbark, bloodwood and messmate.

The great broad valley of the Batavia River is sandy savanna-forest, monotonous and featureless, until the road reaches the edge of another line of mountains at Top Camp. This line of mountains borders the valley of the Batavia on its eastern side hereabouts, is of sedimentary rocks, and is not shown on any of the maps we have. The mining camp of Wenlock (formerly Lower Camp), lies close under the scarped edge of the sedimentary range, and about ½ mile east of the river.

Arrived Wenlock, hot and dusty, about 2 pm, to find a tasty lunch awaiting us in the house of Mr. & Mrs. Joe Fisher - and there was cold water and fresh limeade from the refrigerator. Most people in this far north country now have radio, and refrigerators run on kerosene.

Sammy Zammit, the Maltese butcher, had killed fresh meat and stocked a supply for us in the refrigerator of a mining man who was away from the field. The Fishers placed at our disposal the buildings of the old Larsen Mine, which they now own and propose to work in conjunction with their Black Cat Mine. The buildings are roofed with galvanized iron, and the walls are partly of this material and partly of bark stripped from messmate trees. We are scattered about in various service buildings, and we sleep under the shed of the crushing mill. In the evening we met most of the inhabitants at a social affair in the house of the Ullets. In all, there are 20 men and five women on the Wenlock field. With the exception of two or three prospectors with claims back in the hills, all the population is at the Lower Camp.

Wednesday July 28:

We are all packed up and ready to move south to the Archer River, where we will camp a few days on our way to Coen. Hugh Fisher, who will transport us, is having trouble with his truck. Worked on it most of last night, and expects to be ready for the road about 11 this A.M.

been getting drunk at Iron Range and had not been properly sober for days, had no cooked food in the tucker box. However, we boiled the billy and ate a cake which the driver had with him.

The Pecce entrenched between high banks and running a clear stream 8 to ten yds. wide and about a foot deep on a sandy bottom at the crossing. Big waterworn rocks, dark in color and looking like granite, outcrop in the river bed. The road crossing is made of this rock, retained by logs on the downstream side. A coarse conglomerate - flat-bedded - is exposed where the road climbs up the south bank of the river.

Above the crossing the hills narrow in to the river and the river, in its narrow valley, can be seen to curve in a northerly direction. Was not much impressed with potential prospects at the crossing. Lines or reinforcement trees occur within the cut banks of the river. Reinforest of sorts covers parts of the hills above the crossing, especially on the north side.

From about the one-mile Creek, the road runs close under the western edge of the broad block of mountains of which the Tower Range is a part, and the country changes from generally sandy to larger ridges, in parts rocky. Ironbark, box, and poplar gum enter the composition of the savanna-forest. Cochlospermum without leaves but scattered over with big yellow flowers, becomes abundant on the edges of dry gullies.

Beyond the Pecce is a small stretch of sandy country from which one soon begins a rough climb up the slopes of the Sir William Thomson Range (a section of the Main Divide). The range is of granite. Dry country with open savanna forest of small box, ironbark, bloodwood and eucalypts.

The great broad valley of the Retavia River is sandy savanna-forest, monotonous and featureless, until the road reaches the edge of another line of mountains at Tor Camp. This line of mountains borders the valley of the Retavia on its eastern side. Bracksbouts, is of sedimentary rocks, and is not shown on any of the maps we have. The mining camp of Wenlock (formerly Lower Camp), lies close under the scarped edge of the sedimentary range, and about 3 mile east of the river.

Arrived Wenlock, hot and dusty, about 2 pm, to find a tasty lunch awaiting us in the house of Mr. & Mrs. Joe Fisher - and there was cold water and fresh lime-ade from the refrigerator. Most people in this far north country now have radio, and refrigerators run on kerosene.

Sammy Zammit, the Maltese butcher, had killed fresh meat and stocked a supply for us in the refrigerator of a mining man who was away from the field. The Fishers placed at our disposal the buildings of the old Lerson Mine, which they now own and propose to work in conjunction with their Block Cat Mine. The buildings are roofed with galvanised iron, and the walls are partly of this material and partly of bark stripped from mossmate trees. We are scattered about in various service buildings, and we sleep under the shed of the crushing mill. In the evening we met most of the inhabitants at a social affair in the house of the Villets. In all, there are 20 men and five women on the Wenlock field. With the exception of two or three prospectors with claims back in the hills, all the population is at the lower Camp.

~~Wednesday July 25th~~

We are all packed up and ready to move south to the Archer River, where we will camp a few days on our way to Coen. High Fisher, who will transport us, is having trouble with his truck. Worked on it most of last night, and expects to be ready for the road about 11 this A.M.

Last evening there was another party - a send-off for us and for Mrs. LeBonne, who is going south by the next boat. Songs around the piano in the Joe Fisher house, supper of good eats (the Wenlock women are fine cooks), and some wine which Joe brought out from somewhere. There was a bottle of rum, too, and our cook and one of the older miners got well blotto. George did surprisingly well on the piano. Joe the cook, early in the evening, gave the best rendering of Service's "Dangerous Dan Macgrue" that I have ever heard. There was not a dry eye in the room. I even saw George poking a finder under his specs. Joe looked every inch the old actor as he delivered that piece, mulling his lines now and then and carrying on as only an experienced actor can.

Yesterday we made a tour of the Fisher Mine. Was amazed to see the amount of work that had been done, developing and stoping out the deep alluvial, and working the reef. The deep alluvial lies at a depth of about 90 feet. It yielded much rich gold in the earlier years but most of the known ground carrying profitable values has been worked out. Wash carrying less than 6 or 7 dwts. is not payable. The Fishers have thousands of tons carrying about 5 dwts. The mine was forced to close when population was evacuated in 1942. The owners returned two years ago and since then have used up most of their capital reconditioning and dewatering the mine. At present they are taking out some wash to meet expenses. Their plan is to work the reef when they can buy new pumping equipment. Water is a problem in the reefing proposition. The mine is family-owned, and managed by Joe (W.J.), who is a highly qualified mine manager, and is boning up for a mining engineer's diploma in his spare time. A highly intelligent, studious man of 29 years.

Have collected about 60 spp. of plants in three days. Grass fires have burned over most of the country, leaving only small patches of dry grass in gullies, along the river frontage, and near a chain of lagoons across the river. In the river, big teatrees are in flower and attracting many birds and some flying-foxes (Pteropus scapulatus).

Except for water rats, which seem unusually plentiful on the river, trapping has been poor. Jacking has been good for possums. One of the best mammals from the camp was a small mouse, Leggadina, of an Australian group, which Geoff captured while turning over a sheet of bark in an old camp in search for insects. Two grassland Melomys were the only other rodents caught. Most of the mammals collected in the area were taken by Van before our arrival. Je secured several red Kangaroos, specimens of an animal which is called grey kangaroo here but which George thinks is a walaroo. Other interesting spp. include a series of ~~x~~ 7 possums.

A notable increase in number of spp. of Eucalyptus takes place as one progresses south on the Peninsula. In all the country north of the Jardine I saw but 6 spp. - a true bloodwood, a bastard bloodwood (at Galloway), Moreton Bay ash, poplar gum, box (Red Island Point), and messmate. About Wenlock I have seen 2 bloodwood spp., a bastard bloodwood, Moreton Bay ash (not common), cabbage gum, poplar gum, box, a gum-topped box, messmate, and an ironbark.

Thursday, July 29:

Most of the population of the camp turned out to see us off when we left Wenlock at 1:10 - Hugh's truck pulling a well-laden trailer and lurching along on 5 cylinders. After a few miles, and the changing of two spark plugs, we made steady but slow progress. The road not too bad except for some steep creeks, but the driver going very cautiously and nursing his truck. Reached the Archer River after six o'clock - in time for a few traps (53) to be put out.

Last evening there was another party - a send-off for us and for Mrs. Lemonne, who is going south by the next boat. Songs around the piano in the Joe Fisher house, supper of good eats (the Renlock women are fine cooks), and some wine which Joe brought out from somewhere. There was a bottle of rum, too, and our cook and one of the older miners got well blotto. George did surprisingly well on the piano. Joe the cook, early in the evening, gave the best rendering of Service's "Shagpoor Ian Macgrue" that I have ever heard. There was not a dry eye in the room. I even saw George poking a finger under his specs. Joe looked every inch the old actor as he delivered that piece, rolling his lines now and then and carrying on as only an experienced actor can.

Yesterday we made a tour of the Fisher Mine. Was amazed to see the amount of work that has been done, developing and sluicing out the deep alluvial, and working the reef. The deep alluvial lies at a depth of about 90 feet. It yielded much rich gold in the earlier years but most of the known ground carrying profitable values has been worked out. Wash carrying less than 6 or 7 dwts. is not payable. The Fishers have thousands of tons carrying about 3 dwts. The mine was forced to close when population was evacuated in 1941. The owners returned two years ago and since then have been by most of their capital reconditioning and developing the mine. At present they are taking out some wash to meet expenses. Their plan is to work the reef when they can buy new pumping equipment. Water is a problem in the reefing proposition. The mine is family-owned, and managed by Joe (J.J.), who is a highly qualified mine manager, and is boning up for a mining engineer's diploma in his spare time. A highly intelligent, studious man of 25 years.

Have collected about 60 sp. of plants in three days. Grass fires have burned over most of the country, leaving only small patches of dry grass in gullies along the river frontage, and near a chain of lagoons across the river. In the river, big beetles are in fever and attracting many birds and some flying-foxes (Pteropus scapulatus).

Except for water rats, which seem unusually plentiful on the river, trapping has been poor. Fishing has been good for possums. One of the best samples from the camp was a quail mouse, Leggadina, of an Australian group, which Geoff captured while turning over a sheet of bark in an old camp in search for insects. Two greenland lizards were the only other rodents caught. Most of the mammals collected in the area were taken by Van before our arrival. Je secured several red Kangaroos, specimens of an animal which is called grey kangaroo here but which George thinks is a wallaroo. Other interesting spp. include a series of xxx 7 possums.

A notable increase in number of sp. of Melaleuca takes place as one progresses south on the Peninsula. In all the country north of the Jardine I saw but 6 spp. a true bloodwood, a bastard bloodwood (at Gallows), moreton bay ash, poplar gum, box (Red Island Point), and messmate. About Renlock I have seen 7 bloodwood spp., a bastard bloodwood, Moreton Bay ash (not common), cabbage gum, poplar gum, box, a gum-topped box, messmate, and an ironbark.

Thursday, July 29:

Most of the population of the camp turned out to see us off when we left Renlock at 1:10 - Hugh's truck pulling a well-laden trailer and lurching along on 6 cylinders. After a few miles, and the changing of two spark plugs, we made steady but slow progress. The road not too bad except for some steep creeks, but the driver going very cautiously and nursing his truck. Reached the Archer River after six o'clock - in time for a few traps (55) to be put out.

Thurs. July 29 (Cont'd)

About three miles from Wenlock the road a jump-up of 100 feet or so onto the top of an escarpment of sedimentary rocks, and in another few miles begins to cross a wide stretch of "melon-hole" country timbered with a very open savanna-forest, or savanna, of box trees. Soil a yellowish, pebbly clay, pitted with solution holes, and carrying a good body of grass. Near Mein, the country became still more open as we skirted the north end of the Mein Flats. The flats appear to be undulating plains of yellowish, melon-holed soil carrying very good grass (kangaroo grass, Andropogan intermedius, etc.) and only a thin scattering of trees. According to Whitehouse the soil of the plains (and of the box country?) are derived from Cretaceous sediments. Trees include box and carbeen. Collected ~~ax~~ a rock sample from a flagged path at the old abandoned telegraph station at Mein.

The old telegraph station is built of galvanized iron on high stumps in the form of a hollow square. From the eighties until quite recently it was occupied by telegraph line staff. One of the last men there got in the horrors on Doug Fisher's illicit rum, and shot himself. The building is now owned by Fred Keppel, owner of Merluna cattle station.

South of Mein the good box country continues for a number of miles. Beyond that is about two miles of hard lateritic ridge on which we hit 20 mph; then varied ridgy country carrying a variety of eucalypts and other trees. On the north bank of Charlotte Creek we descended another sedimentary jump-up, and between there and the Archer crossed poor, sandy ridges carrying mostly messmate. Several swampy teatree flats close to the Archer. Big boulders of granite on the slope down to the river.

Did not bother to rig a camp on the Archer. Camp is merely a fire, and cots and chairs on a burned-over, dusty high floodbank ledge on the north side of the river.

Sat. July 31:

At breakfast time yesterday Van came back from traps with a grassland Melomys which to my untrained eye looks different - very sandy color and also smaller - from the species we have been getting further north, but which George says is the same species and same rat. That was total catch from traps.

Spent a little time im roving camp before we went our various ways, collecting and spying out the country. The only regular tentage rigged was my tent, which in this windy country I must have in order to work on plants. Don, with his small bird equipment, is set up under a bushy tree. Geoff has elected to work in the open. George and Van have a gunyah of ground cloths and leafy cabbage-gum branches.

Mornings and evenings the air is delightfully soft, rather than cool, and there is not enough wind to be bothersome. Days are an alternation of high, wind-driven overcast, and burst of bright sun accompanied by still stronger southeast wind. Dust blows, a scud of rain comes over now and then. Temperature in my tent, while I work on plants in the afternoon, varies from 97 to 100 F. The clear soft water of the river, where I bathe near the boys camp in the evening, has a relaxing, air-conditioned feel.

We move on to Coen tomorrow. For mammals, the camp has been poor. Geoff's diverse activities have given good results, including 8 spp. of fish and one crustacean from the river. Don, with Hugh Fisher's help, keeps on getting new birds for his collection. Plants for the two days total 43 numbers, 279 spp.

Thurs. July 20 (Cont'd)

About three miles from Warlock the road a jump-up of 100 feet or so onto the top of an escarpment of sedimentary rocks, and in another few miles begins to cross a wide stretch of "melon-hole" country timbered with a very open savanna-forest, or savanna, of box trees. Soil a yellowish, pebbly clay, pitted with solution holes, and carrying a good body of grass. Near Mein, the country becomes still more open as we skirted the north end of the Mein Flats. The flats appear to be undulating plains of yellowish, melon-holed soil carrying very good grass (kangaroo grass, Andropogon intermedius, etc.) and only a thin scattering of trees. According to Whitehouse the soil of the plains (and of the box country?) are derived from Cretaceous sediments. Trees include box and cabbage. Collected an a rock sample from a flagged path at the old abandoned telegraph station at Mein.

The old telegraph station is built of galvanized iron on high stumps in the form of a hollow square. From the eighties until quite recently it was occupied by telegraph line staff. One of the last men there got in the horrors on Pony Fisher's illicit rum, and shot himself. The building is now owned by Fred Keppel, owner of Mein cattle station.

South of Mein the good box country continues for a number of miles. Beyond that is about two miles of hard lateritic ridge on which we hit 20 mph; then varied hilly country carrying a varied lot of eucalypts and other trees. On the north bank of Charlotte Creek we descended another sedimentary jump-up, and between there and the Archer crossed poor, sandy ridges carrying mostly mesquite. Several swampy tea-tree flats close to the Archer. Big boulders of granite on the slope down to the river.

Did not bother to rig a camp on the Archer. Camp is merely a fire, and cots and chairs on a burned-over, dusty high floodbank ledge on the north side of the river.

Sat. July 21:

At breakfast time yesterday Van came back from traps with a pressed and Melanya which to my untrained eye looks different - very sandy color and also smaller - from the species we have been getting further north, but which George says is the same species and same rat. That was total catch from trap.

Spent a little time in roving camp before we went out various ways, collecting and spying out the country. The only regular tentage rigged was my tent, which in this windy country I must have in order to work on plants. Don, with his small bird equipment, is set up under a bushy tree. Geoff has elected to work in the open. George and Van have a gunyah of ground cloths and leafy eucalypt-gum branches.

Mornings and evenings the air is delightfully soft, rather than cool, and there is not enough wind to be bothersome. Days are an alternation of high, wind-driven overcast, and burst of bright sun accompanied by still stronger southeast wind. Dust blows, a scud of rain comes over now and then. Temperature in my tent, while I work on plants in the afternoon, varies from 97 to 100 F. The clear soft water of the river, where I bathe near the boys camp in the evening, has a relaxing, air-conditioned feel.

We move on to Coen tomorrow. For mammals, the camp has been poor. Geoff's diverse activities have given good results, including 8 spp. of fish and one crustacean from the river. Don, with high Fisher's help, keeps on getting new birds for his collection. Plants for the two days total 43 numbers, 272 spp.

Sat. July 31 (Cont'd)

Most of my collecting has been done in the bed of the river and on the flood terraces which border the river on either side. The savanna forests out from the river are very dry and growth and reproductive activities are practically at a standstill. The river, where we are camped, at the crossing of the road and the telegraph line, is about ¼ mile wide and full of great, rounded granite rocks polished by the combined action of floods and windblown sand. We are at a granite bar where the river cuts through the Gieckie Range. The bar is about ½ mile wide. Have not been far above it, but downstream below the bar the river has a sandy bed and gives off numerous side channels or anabranches deeply cut into dark grey alluvium. Throughout its length hereabouts the river has numerous long, narrow islands of sand and silt in its channel. A teatree with narrow grey leaves, and stout trunk pushed into leaning and reclining positions by force of flood waters, is the characteristic tree of the islands. Rainforest trees and shrubs also occur (Syzygium, Sarcocephalus, Cryptocarya, Faradaya, Diospyros, Mallotus, etc.); in places forming a thin forest, open underneath and somewhat trampled by cattle. Have seen scrub turkeys in these narrow strips of forest, but no nesting mounds.

Probably the best plant from the camp is Crataeva 19729 - which will be the first record of the genus from Australia.

Today the mailman who travels with packhorses from Coen to Moreton and back again once a fortnight, unsaddled for lunch about 300 yards from camp and did not call to say goodday. Horsebells are clanking on the opposite bank of the river tonight. A Merluna droving plant, returning from delivering bullocksdown near Laura, is on the way home.

Sunday Aug. 1:

George had a waterrat to skin, we all had to pack, the driver was slow in arranging his load, and it was 10 o'clock before we left the Archer for Coen. Crossing the river took quarter of an hour. We were 2½ miles on the road when I found I had lost my Leica. Had been making color shots with the Contax, and left the Leica on the bank of the river where I changed color films. Don volunteered to go back to the river on a bike; the chain broke and he had to wheel the bike back. That lost us an hour. At Deep Creek, some 20 odd miles out of Coen, we were making the down grade for the hidden crossing when a shirtless and hatless man came up out of the creek waving his arms wildly to stop us. It was Wee Hector Macdonald, battling out from Coen with a load of mine pump machinery on a 1932 Chev, and stuck in deep sand in the bed of the creek. Pushing his truck out, and carrying the gear he had dumped, took another half hour or so. The sun was almost down before we took a sharp turn from the 2-wheelrut road and drove up the bank of the Coen River to "The Bend", about 2 miles above the township.

Oldtimer Herb Thompson, hotelkeeper, etc., at Coen , had given us permission to camp in a hut at the Bend. We found the doors locked and the galvanized iron shutters nailed tight. Off loaded, bathed in the river, and after supper drove into town to get the keys, and meet people. Few people about. Several men from cattle stations who had horses in training for the races. A bookmaker, early on the field to get the lowdown for his business. An eccentric old Canadian from Manitoba - lumberjack turned miner. Cecil Wilson, business manager and transport man for Thompson, who lost no time in calling us to the bar for one on the house. A policeman who strolled along to find out who had arrived in town, but kept at a discreet distance from the open door of the bar. Mrs. Thompson, a tall dignified old lady, walking with a stick. And old Herb himself. A big, rugged man, pipe in mouth, wearing a wide hat, and barefooted.

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Probably the best plant from the camp is Grevillea 18729 - which will be the first record of the genus from Australia.

Today the mailman who travels with packhorses from Coen to Moreton and back - one a fortnight, unscheduled - for lunch about 800 yards from camp and did not call to say goodday. Horsebells are clanking on the opposite bank of the river tonight. A motorized drovING plant, returning from delivering bullockdown near Laura, is on the way down.

Sunday Aug. 1:

George had a waterpot to mend, we all had to pack, the driver was slow in arranging his load, and it was 10 o'clock before we left the Archer for Coen. Crossing the river took quarter of an hour. We were 5½ miles on the road when I found I had left my helm. Had been making color plots with the Coenites, so left the helm on the bank of the river where I changed color films. Don volunteered to go back to the river on a bike; the chain broke and he had to wheel the bike back. That lost us an hour. At Deep Creek, some 20 odd miles out of Coen, we were making the down grade for the hidden crossing when a shirtless and hatless man came up out of the creek waving his arms wildly to stop us. It was Joe Doctor Macdonald, bottling out from Coen with a load of mine pump machinery on a 1932 Ford, and stuck in deep sand in the bed of the creek. Pushing his truck out, and carrying the gear he had dumped, took another half hour or so. The sun was almost down before we took a sharp turn from the telegraph road and drove up the bank of the Coen River to "The Sand", about 2 miles above the township.

Oldtimer Herb Thompson, hotelkeeper, etc., at Coen, had given us permission to camp in a hut at the Sand. We found the doors locked and the galvanized iron shutters nailed tight. OFF loaded, bathed in the river, and after supper drove into town to get the keys, and meet people. Few people about. Several men from cattle stations who had horses in training for the races. A bookmaker, early on the field to get the lowdown for his business. An eccentric old Canadian from Manitoba - lumberjack turned miner, Cecil Wilson, business manager and transport man for Thompson, who lost no time in calling us to the bar for one on the house. A policeman who strolled along to find out who had arrived in town, but kept at a discreet distance from the open door of the bar. Mrs. Thompson, a tall dignified old lady, walking with a stick. And old Herb himself. A big, rugged man, pipe in mouth, wearing a wide hat, and barefooted.

Sunday, Aug. 1 (Cont'd)

Since about this time last year I have been in correspondence with Thompson, and this evening I went in provided with maps, hoping to add to my information on the district and discuss arrangements for getting into the Rocky Scrub, which is our big objective in this area. But old Herb had been drinking too much, and admitted it. He also was not very much at ease with us strangers. So, about 9 o'clock we called at the post office for our mail and returned to camp.

Monday, Aug. 2:

With George and Geoff, spent the morning in the town gathering information. Thompson recommends approach to the Rocky Scrub by way of the upper Peach River. Offers to provide motor transport over an old, disused road to a point where a battery used to stand high on the Peach, and let us have pack horses for transport into the scrub, which he says is only a couple of miles from the end of the old road. Wilson says he cannot move us until after the races - Sunday or Monday. Conversation with other people leads me to doubt the accuracy of Thompson's information. Others say the end of the old road is 6 or 8 miles from the big scrub. Thompson, now 72, is somewhat senile; Wilson, his righthand man, is saying nothing. I have the impression that some people in Coen are not so frank and willing to help as the good folk we met farther north.

In town we called on Mrs. May M. Armbrust, a widow who has lived here all of her 55 years, owns a cattle run, butchering business, store, and is agent for ANA airways. She is providing us with eggs (our first in two months), meat, and fresh vegetables. Has a rambling old house almost hidden in ornamental plantings, with a cool verandah where one sits on red-painted canvas chairs amongst pot plants, and behind the house a great arbor covered with Bougainvillea. Down on the creek (the Lankelly) is a big garden planted to cabbage, white turnips, kohlrabi, ~~salamander~~ salamander lettuce, radish, eschallots, carrots, beets, tomatoes, bananas, etc. Blacks do the work, under supervision.

Sergeant Farrel, chief of police and local Protector of Aboriginals, and his two constables having a busy time attending to the needs of natives in town from the cattle stations for the races and needing spending money and orders on the stores for clothing. Farrell not too keen on boys from the Thursday Island area. Says they drink strong drink; he has information of a sly grog seller on the way in for the races, and hopes there will be no trouble from our bots. Why he should be especially concerned about our three boys when hundreds of other natives will be in town expecting to get the liquor they have always got, is beyond me to understand.

Coen is in a flat basin in the hills where Lankelly Creek joins the Coen River. All around it are thinly timbered dry rocky hills and a bit west of south, close to the town, is conical Mt. White with exposures of white rock (quartzite) on its sides, and around the rocks a thin growth of low, dark trees which probably represent an outpost of depauperate rainforest.

Coen is called a town by courtesy. The total permanent white population is 25 to 30, and the one street has buildings on only one side. A PMG staff of about 5, and the tree police, make up about a third of the population. Thompson has a small store, Mrs. Armbrust a larger one, and a butcher shop. The pub, surmounted by the blue painted sign "Drink at Herb Thompson's Coen Hotel," is the center of the town.

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Monday, Aug. 2:

With George and Geoff, spent the morning in the town gathering information. Thompson recommends approach to the Rocky Scrub by way of the upper Peach River. Offers to provide motor transport over an old, disused road to a point where a battery used to stand high on the Peach, and let us have pack horses for transport into the scrub, which he says is only a couple of miles from the end of the old road. Wilson says he cannot move us until after the races - Sunday or Monday. Conversation with other people leads me to doubt the accuracy of Thompson's information. Others say the end of the old road is 6 or 8 miles from the big scrub. Thompson, now 72, is somewhat senile; Wilson, his right-hand man, is saying nothing. I have the impression that some people in Coen are not so frank and willing to help as the good folk we met farther north.

In town we called on Mrs. May M. Armbrust, a widow who has lived here [illegible] of her 55 years, owns a cattle run, butchering business, store, and is agent for Ansett airways. She is providing us with eggs (our first in two months), meat, and fresh vegetables. Has a rambling old house almost hidden in ornamental plantings, with a cool verandah where one sits on red-painted canvas chairs amongst pot plants, and behind the house a great arbor covered with Bougainvillea. Down on the creek (the lovely) is a big garden planted to cabbage, white turnips, kohlrabi, ~~xxxxxxxxx~~ swamper lettuce, radish, cauliflower, carrots, beets, tomatoes, bananas, etc. Blacks do the work under supervision.

Sergeant Farrell, chief of police and local Protector of Aborigines, and his two constables having a busy time attending to the needs of natives in town from the cattle stations for the races and meeting spending money and drovers on the stores for clothing. Farrell not too keen on boys from the Thursday Island area. Says they drink strong drink; he has information of a sly grog seller on the way in for the races, and hopes there will be no trouble from our boys. Why he should be especially concerned about our three boys when numerous of other natives will be in town expecting to get the liquor they have always got, is beyond me to understand.

Coen is in a flat basin in the hills where Bankelly Creek joins the Coen River. All around it are thinly timbered dry rocky hills and a bit west of south, close to the town, is conical Mt. White with exposures of white rock (quartzite) on its ridge, and around the rocks a thin growth of low, dark trees which probably represent an outpost of deciduous rainforest.

Coen is called a town by courtesy. The total permanent white population is 55 to 60, and the one street has buildings on only one side. The RMC staff of about 6, and the three police, make up about a third of the population. Thompson has a small store, Mrs. Armbrust a larger one, and a butcher shop. The pub, surmounted by the blue painted sign "Drink at Herb Thompson's Coen Hotel," is the center of the town.

Thursday Aug. 5:

Since Monday I have been dividing my time between collecting and preparing plants and walking in and out of town in search of information on the Rocky Scrub and of ways of getting into it.

Botanical efforts have y ielded me 46 numbers, practically all of them plants on the flood bed of the Coen River. Out from the river the country is so dry, and the hills so devoid of life in the dry season, that time would be wasted in exploring them while other things have to be done.

The pursuit of information on the Rocky Scrub and its approaches has been difficult. Commercial interests in cattle raising and in gold are west of the Dividing Range. The Rocky Scrub is on the eastern fall. The consensus of opinion is that the Rocky Scrub is best approached from the head of the Peach River, a head of the Archer. Herb Thompson recommended this in the first place. Dick Holden, a Maori halfcaste, and Sweatman, both gold prospectors, and both half drunk for race week, say the same thing.

This morning George and I called on old Maurice Shepheard, 73 years old and still in full possession of his faculties and carrying on a carrying business between Coen and the coast. He got back to town only last night after meeting a boat at the Annie River. Maurice confirms most of the information got from the less responsible citizens, and from him I have first hand information on the road and trail between Coen and the old battery site on the Leo River, on the east fall of the Range and in the middle of the Rocky Scrub. It was on the Leo that Lakeland, who discovered and opened the Rocky Gold Field, had his mine and erected his battery in the late '90's or early nineteen hundreds. He hauled, carried, and parbuckled his battery through the rugged rainforest country from the coast to the upper Leo with the help of blacks; the job lasting over a year,according to Shepheard.

In later years Sheppheard (check spelling) acquired the old Lakeland battery and moved it over the top of the Range and down on to the upper Peach. The new battery site was close under the Range and stone for crushing was packed over to it from the east side. Still later the battery was bought by Densley and moved to the Batavia River field.

Our base for approach to the Rocky Scrub will be at the old battery site high on the Peach. From there transport will be by pack horses. We will get into the big Rocky Scrub in about six miles, and probably camp where two old trails part at a mango tree about nine miles from the Peach River base and on top of the Range.

Until today I was under the impression that the Rocky River of the maps flowed through the middle of the Rocky Scrub, but now it seems that the Leo is really the central stream. Certainly the Leo (and perhaps the upper Peach) is the classic biological locality going under the name Rocky Scrub. McLellan, with Bill Sheppheard as companion and guide, collected from the head of the Peach and across to the Leo and down the Leo to the coast in 1923. (McLellan collected his first taipan on the Peach on that trip, according to Bill Sheppheard). Darlington is said to have reached the Rocky Scrub from the head of the Peach in 1932. Miss Neuhauser went the same way in the later 30's but apparently she did not get far into the Rocky, or for very long, from her base at the old battery site of the Peach.

This Neuhauser person must be quite a gal. A Jewish refugee from Hitler's Germany, she set up as a zoological collector in North Queensland and sold skins to Dick Archbold and others. She travelled with an unsuccessful gold prospector named Bill Scott who had a small team of packhorses, and knew his way around these middle parts of the Peninsula. Old hands declare that she let it be known that she wanted a man, was open to pay L200 to the man who would marry her and give her Australian

Thursday Aug. 6:

Since Monday I have been dividing my time between collecting and preparing plants and walking in and out of town in search of information on the Rocky Scrub and of ways of getting into it.

Botanical efforts have yielded me 46 numbers, practically all of them plants on the flood bed of the Deen River. Out from the river the country is so dry, and the hills so devoid of life in the dry season, that time would be wasted in exploring them while other things have to be done.

The pursuit of information on the Rocky Scrub and its approaches has been difficult. Commercial interests in cattle raising and in gold are west of the dividing Range. The Rocky Scrub is on the eastern fall. The consensus of opinion is that the Rocky Scrub is best approached from the head of the Beech River, a head of the Prater. Herb Thompson recommended this in the first place. Dick Holden, a Maori half-breed, and Swedman, both gold prospectors, and both half drunk for two week, say the same thing.

This morning George and I called on old Maurice Shepherd, 75 years old and still in full possession of his faculties and carrying on a carrying business between Deen and the coast. He got back to town only last night after meeting a boat at the Tania River. Maurice confirms most of the information got from the less reasonable citizens, and from him I have first hand information on the road and trail between Deen and the old battery site on the Leo River, on the east fall of the Range and in the middle of the Rocky Scrub. It was on the Leo that Lakeland, who discovered and opened the Rocky Gold Field, had his mine and erected his battery in the late '80's or early nineteen hundreds. He hauled, carried, and perhaps had his battery through the rugged mountainous country from the coast to the upper Leo with the help of bullocks: the job lasting over a year, according to Shepherd.

In later years Shepherd (check spelling) acquired the old Lakeland battery and moved it over the top of the Range and down on to the upper Beech. The new battery site was close under the Range and stone for crushing was packed over to it from the east side. Still later the battery was bought by Tenely and moved to the Tatavin River field.

Our base for approach to the Rocky Scrub will be at the old battery site high on the Beech. From there transport will be by pack horses. We will get into the big Rocky Scrub in about six miles, and probably camp where the old trails part at a mango tree about nine miles from the Beech River base and on top of the Range.

Until today I was under the impression that the Rocky River of the maps flowed through the middle of the Rocky Scrub, but now it seems that the Leo is really the central stream. Certainly the Leo (and perhaps the upper Beech) is the classic biological locality going under the name Rocky Scrub. McLellan, with Bill Shepherd as companion and guide, collected from the head of the Beech and across to the Leo and down the Leo to the coast in 1922. (McLellan collected his first trip on his Beech on that trip, according to Bill Shepherd). Harlington is said to have reached the Rocky Scrub from the head of the Beech in 1932. Miss Neubauer went the same way in the later 30's but apparently she did not get far into the Rocky, or for very long, from her base at the old battery site of the Beech.

This Neubauer person must be quite a gal. A Jewish refugee from Hitler's Germany, she set up as a zoological collector in North Queensland and said skins to Dick Archbold and others. She travelled with an unsuccessful gold prospector named Bill Scott who had a small team of packhorses, and knew his way around these middle parts of the hinterland. Old Hands declare that she let it be known that she wanted a man, was open to pay $500 to the man who would marry her and give her Australian

citizenship so that she could get her money out of Germany. No one seemed to want the 200 quid. But after 3 weeks on the Peach and in the Rocky she married Scott. They are still together, and three offspring have come from the match. Last report is that the Scotts have set out from Hughenden in a refrigerated trailer outfit to collect in the Northern Territory - Chicago Museum and perhaps other buyers to get the mammal collections.

Friday Aug. 6:

All hands but the cook and I to the races. Late in the afternoon they began to straggle back, fed up with the races and hungry for food. Only Van is sticking it out and staying in for the ball tonight.

Attending to plant collections and catching up with odds and ends of work, including details of our move out to the Rocky Scrub. Feel that I might be getting the 'flu which is raging in Coen.

The showery weather which has been our experience practically from the beginning on the Peninsula has caught up with us at Coen. Thin misty rain started last night, moistening the cust of the parched savannas and dripping through the leaves of the mango tree under which I sleep. Similar showers, with strong gusts of SE wind, have fallen throughout the day.

Sunday, Aug. 8:

In town most of yesterday on organizational chores. All arrangements made for the trip down to Cooktown and on to Shipton's Flat. Hugh Fisher will drive us through to Laura, or, if anything should prevent him from doing the job, Cecil Wilson will take us Thompson's 3-ton truck. Norman Watkin will transport us from Cooktown south to Shipton's Flat.

The plan is to leave Coen for Laura on the 26th and arrive in time to catch the weekly rail motor which leaves for Cooktown on the afternoon of the 31st August. We will travel short stages and collect between Coen and Laura (camps probably at Ebagoola, Musgrave, and Hann River).

The situation in regard to work in the Rocky Scrub is not so clear. Thompson and Wilson both rushed with work in the hotel, Wilson recovering from flu, and both of them lacking in frankness and hard to nail down to anything definite. I hope we can get away for the Peach on Monday. Thompson's truck left yesterday afternoon for the Annie River to pick up loading and we cannot start until it returns. I found this out indirectly. Thompson or Wilson said nothing about it in our discussions.

Last night George and Van had a remarkably successful hunt. Joe Fisher Sr. drove them about 8 miles north along the road to the airport and took his dog with him. With the help of the dog, a bandicoot (isoodon) was caught in a hollow log. Shot in trees after dark were a native cat, 6 possums and 6 ringtails. Counting pouched young, the excursion yield 18 mammal specimens. Don, who went along, shot a pair of frogmouths and a possum or two.

The race meeting has not passed with incident. Death took a lady visitor from Laura - one of a party who came up by air. The body was taken to Cairns for post mortem on the ambulance plane which has been here for the races. I saw it leave the town on a stretcher in a truck, and standing beside it a gaudily painted chocolate wheel which had been operated at the races for ambulance benefit.

citizenship so that she could get her money out of Germany. No one seemed to want the 200 quid. But after 3 weeks on the French and in the Rocky she married Scott. They are still together, and three offspring have come from the match. Last report is that the Scotts have set out from Copenhagen in a refrigerated trailer outfit to collect in the Northern Territory - Chicago Museum and perhaps other buyers to get the mammal collections.

Friday Aug. 8:

All hands but the cook and I to the reces. Late in the afternoon they began to straggle back, fed up with the reces and hungry for food. Only Van is sticking it out and staying in for the ball tonight.

Attending to plant collections and catching up with odds and ends of work, including details of our move out and to the Rocky tomorrow. Feel that I might be getting the 'flu which is raging in Cooen.

The showery weather which has been our experience practically from the beginning on the Peninsula has caught up with us at Cooen. Thin misty rain started last night, moistening the coat of the parched savannas and dripping through the leaves of the mango tree under which I sleep. Similar showers, with strong gusts of wind, have fallen throughout the day.

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The reces meeting has not passed with incident. Death took a lady visitor from Laura - one of a party who came up by air. The body was taken to Cairns for post mortem on the ambulance plane which has been here for the reces. I saw it leave the town on a stretcher in a truck, and standing beside it a gaudily painted chocolate wheel which had been operated at the reces for ambulance benefit.

Sunday Aug. 8 (Cont'd)

The flying ambulance is a public service supported by contributions from people living in the bush, and no doubt subsidized in part by government. A contribution of 2/6 a week entitles one to the service, also one's family. A good insurance for dwellers in these remote places.

This morning we had a visit from the police - a constable and two black trackers mounted on good horses, and without a wea on between them. Some person or persons raided the airport (14 miles away) while the groundsman was in town for the races and got away with 16, 50-gal. drums of gasoline. Old Joe Fisher is suspected, and the policeman is looking for evidence.

Final arrangements made for our horse outfit with Alan Petersen, head stockman for Thompson, who rode out to see me. Five pack horses and four riding horses, with gear, in charge of blackboy Alf Young, will leave early in the morning for the old battery site on the Peach River.

The flying ambulance is a public service supported by contributions from people living in the bush, and no doubt subsidized in part by government. A contribution of $8 a week entitles one to the service, also one's family. A good insurance for dwellers in these remote places.

This morning we had a visit from the police - a constable and two black trackers mounted on good horses, and without a word on between them. Some person or persons raided the airport (14 miles away) while the groundsman was in town for the week end got away with 18, 40-gal. drums of gasoline. Old Joe Fisher is suspected, and the policeman is looking for evidence.

First arrangements made for our horse outfit with Alan Petersen, head shoeing for Thompson, who rode out to see me. Five pack horses and four riding horses, with Peter, in charge of Blackboy Alf Young, will leave early in the morning for the old battery site on the Fesch River.

Thursday, Aug. 12:

This is another catch up job on journal notes. After a series of viscissitudes we have our base camp on the Peach River, under the western foot of the Dividing Range and the first party has gone across the range to the Rocky Scrub.

Monday was a terrific day. Waking at small daylight, as usual, and getting out of bed right away, as I have been doing to wake our usually sozzled cook the past few days, I found old Joe had gone. He had left during the evening, after Geoff and I had walked into town to check on the truck situation and post letters, avoided us, and made a night of it. With Geoff's help in finding things, I got together a very poor breakfast then set out for town to retrive the cook and see that the truck left on good time. Found Joe in bed in a hotel room (in one of the collection of sheds that comprise the hotel) reeking of spilled whiskey, and not quite dead drunk.

Checking with Thompson and his henchman, I found that a few items bought in the store were waiting to be loaded, and that the truck was expected to start after being serviced and after a guide had been procured for the driver. Contacting Peterson to see if the horse plant had starter, as arranged, I found him making sling straps for our box loads, and sure that the horses, in charge of blackboy Willie Alf Young, would start for the Peach while the day was still young.

There was delay in getting the truck ready. A blackboy guide for the truck, supposed to be provided by the police sergeant at Thompson's request, was not in sight. So I hied me to the police station and found that nothing had been said to the sergeant. Farrell, a smart man, got busy right away, and within five minutes he had arranged the loan of a boy (Tommy Fox) from Maurice Shephard. A full hour elapsed before Tommy could be found. Then - it was about 11:45 - the driver refused to start until he had eaten lunch. We could get lunch at the hotel at noon, he said, and he would arrange with the cook for us to eat before "the mob". We sat down to eat at 12:30, and by one o'clock I had retrieved Joe from the bar and laid him out on the floor of the truck. Tommy was there with his swag and we were all ready to start when the driver announced that he had invited the cook out for the ride to the Peach.

By that time I was past protest. The cook, a buxom lass from Oxfordshire (Daisy Parsons), working her way around the world, quite on the level, I believe, did not keep us waiting long. On the way out to camp I found Willie Alf Young on his way into town to buy something for his wife before leaving for the Peach. Carried him back to camp and set him about getting the horses saddled (Thompson's horse plant was camped beside us at the Bend).

Was about half way through loading the truck when Petersen, Thompson's head stockman, rode up to say that the horses, which should have been away by 10 o'clock at the latest, were being mustered, all the gear was ready, and that our pack plant would travel late to reach the Peach that evening (distance supposed to be 21 miles).

Finally, at 2:20, we left the Bend, and drove fast, with loud protests from Joe, beginning to recover a bit, and getting badly bumped in his nest on the tail of the truck.

About 10 or 11 miles north of Coen on the "main road" we waited while Tommy found where the old road to Shephard's battery crossed Croll Creek. The crossing was on deep sand, about 30 yards wide, and partly blocked by a big driftwood tree lying in the channel. Getting around the head of that tree, with all hands pushing and building tracks of sticks under the dual wheels of the truck, took up a good half hour. After that the real fun started. Our route lay across open (savanna-forested) country with few natural difficulties and was marked by blazed trees, blazed so long ago that most of the marks were visible as only healed scars on the bark. The only semblance of a road was at the crossings of the numerous gullies, and sometimes a horse pad which followed the old blazed track in places. Our guide did not know the

Thursday, Aug. 12:

This is another catch up job on journal notes. After a series of vicissitudes we have our base camp on the Peace River, under the western foot of the Dividing Range and the first party has gone across the range to the Rocky Scrub.

Monday was a terrific day. Waking at small daylight, as usual, and getting out of bed right away, as I have been doing to wake our usually somnolent cook the past few days, I found old Joe had gone. He had left during the evening, after Geoff and I had walked into town to check on the truck situation and post letters, avoided us, and made a night of it. With Geoff's help in finding things, I got together a very poor breakfast then set out for town to revive the cook and see that the truck left on good time. Found Joe in bed in a hotel room (in one of the collection of sheds that comprise the hotel), reeking of spilled whiskey, and not quite done drunk.

Checking with Thompson and his henchman, I found that a few items bought in the store were waiting to be loaded, and that the truck was expected to start after being serviced and after a guide had been procured for the driver. Contacting Patterson to see if the horse plant had started, as arranged, I found him making strong strong for our box loads, and sure that the horses, in charge of blackboy Willie Jr. Young, would start for the Peace while the day was still young.

There was delay in getting the truck ready. A blackboy guide for the truck, supposed to be provided by the police sergeant at Thompson's request, was not in sight. So I hied me to the police station and found that nothing had been said to the sergeant. Farrell, a smart man, got busy right away, and within five minutes he had arranged the loan of a boy (Tommy Fox) from Service Shepherd. A full hour elapsed before Tommy could be found. Then - it was about 11:45 - the driver refused to start until he had eaten lunch. He could get lunch at the hotel at noon, he said, and he would arrange with the cook for us to get before "the rush". We set down to eat at 12:30, and by one o'clock I had relieved Joe from the car and said him out on the floor of the truck. Tommy was there with it, hung and we were all ready to start when the driver announced that he had invited the cook out for the ride to the Peace.

By that time I was quite provent. The cook, a bacon face from Oxfordshire (Tommy Parsons), working her way around the world, quite on the level, I believe, did not keep us waiting long. On the way out to camp I found Willie Jr. Young on his way into town to buy something for his wife before leaving for the Peace. Carried his back to camp and set him about getting the horses saddled (Thompson's horse plant was camped beside us at the Farm).

Was about half way through loading the truck when Patterson, Thompson's head stockman, rode up to say that the horses, which should have been away by 10 o'clock at the latest, were being mustered, all the gear was ready, and that our pack plant would travel late to reach the Peace that evening. (distance supposed to be 21 miles).

Finally, at 2:20, we left the yard, and drove fast, with loud protests from Joe, beginning to recover a bit, and getting badly bumped in his nest on the tail of the truck.

About 40 or 41 miles north of Coen on the "main road" we waited while Tommy found where the old road to Shepherd's battery crossed Groll Creek. The crossing was on deep sand, about 60 yards wide, and partly blocked by a big driftwood tree lying in the channel. Getting around the head of that tree, with all hands washing and building tracks of sticks under the dual wheels of the truck, took us a good half hour. After that the real fun started. Our route lay across open (savanna-forested) country with few natural difficulties and was marked by blazed trees, blazed so long ago that most of the marks were visible as only healed scars on the bark. The only semblance of a road was at the crossings of the numerous gullies, and somewhere a horse pad which followed the old blazed track in places. Our guide did not know the

country well enough to depart very far from the blazed line, and our driver, afraid of his old tires, would not drive bush anyway. So we had to walk ahead, clearing fallen timber and cutting trees which had grown up since the road was abandoned in or about 1932.

The dry, sandy bed of Fitz's Ck., was crossed about 5:30. Darkness caught us between there and L Creek, and we pushed on, clearing road by the lights of the truck, and reached L Creek between 8 and 8:30. Am not sure of the time because I lost my watch. Discovered the loss when we reached camp and I wanted to note the time.

A nice hole of water just below the road crossing of L Ck., and the creek running about 5 yards wide. Off loaded just what we needed for the night; the boys soon had a big fire going; and old Joe, miraculously able to carry on by this, attended to supper. Our 100 lb. supply of corned beef - dry salted - was spread out on bushes laid on the ground. We rigged our camp cots, and some their mosquito nets (mosquito nets not needed in this dry country at this time of year) and Daisy parked herself on the seat of the truck.

Next morning after a bite of breakfast, I took Willie and walked back about 2 miles searching for my watch in places where I thought I might have lost it while clearing track. Was nearly back to camp when a messenger arrived to say Geoff had found the watch, half covered by sand, beside the truck.

The worst of the road lay between L Creek and the Peach. Country ridgy; many gullies; and patches of messmate sandridge on which the truck had hard going. About 5 miles from our night camp we crossed a big branch of the Peach, with running water, which Shephard calls Falls Ck. The old battery site on the Peach was reached about 1 o'clock, and we off loaded down in the channel, in the edge of the tall floodbank rainforest. A good camp site, offering shade, and shelter from the strong SE wind.

The horses, in charge of Willie Alf Young, arrived about 2:30. Willie Alf had taken the Blue Mountains road, traveled until after dark the night before, and lost a horse carrying a packsaddle. Questioned on his horse count, he insisted that he had left Coen with 5 packhorses. He was just as positive that he had lost only one horse. But he arrived with 3 packhorses and four riding horses, not including the horse he himself rode.

Sent word to Thompson by the truck driver re the lost horse or horses and asked for the number to be made up to the five packhorses.

It did not occur to me to make a detailed examination of the saddlery before the truck left to return to Coen. When I looked over the gear I found we had but one sursingle for three pack outfits, and two sets of sling straps instead of three. The horses are not in very good condition, and all of them have saddle sores or girth galls. Our Rocky Scrub venture is getting off to a bad start.

Yesterday, with Willie Alf Young as guide for the first part of the way, George and I rode toward the Rocky to examine the country and see the track over which our transport will travel. Left camp at 7:45 and got back at 4:45. Traveling was good most of the way, and neither of us suffered much from the ride.

Followed the Peach (really a big tributary, called Bonanza Ck. according to Willie Alf) down about a mile, then crossed to a cattle yard and ruinous bark hut on the north bank, where we struck the old trail leading almost due east to the foot of the mountains. The same old blazed trail we had followed from Croll Ck. to a mile or so below our camp on Bonanza Ck. The long detour, west and then east, was to dodge a spur ridge carrying scrubby vegetation too thick to get through with horses, according to Willie Alf.

country well enough to depart very far from the blazed line, and our driver, afraid of his old tires, would not drive back anyway. So we had to walk ahead, clearing fallen timber and cutting trees which had grown up since the road was abandoned in or about 1922.

The dry, sandy bed of Pile's Ck., was crossed about 7:30. Darkness caught us between there and Deep Creek, and we pushed on, clearing road by the lights of the truck, and reached L Creek between 8 and 8:30. We not sure of the time because I lost my watch. Discovered the loss when we reached camp and I wanted to note the time.

A nice hole of water just below the road crossing of L Ck., and the great running about 3 yards wide. Off loaded just what we needed for the night: the boys soon had a big fire going; and old Joe, miraculously able to carry on by lamp, attended to supper. Our 100 lb. supply of corned beef - dry salted - was spread out on bunks laid on the ground. We rigged our camp cots, and saw their mosquito nets (mosquito nets not needed in this dry country at this time of year) and Daisy perched herself on the seat of the truck.

Next morning after a bite of breakfast, I took Willie and walked back about 2 miles searching for my watch in places where I thought I might have lost it while clearing track. Was nearly back to camp when a messenger arrived to say Geoff had found the watch, half covered by sand, beside the truck.

The worst of the road lay between L Creek and the Beach. Country rocky; very gullies; and patches of mesquite scrubbing on which the truck had hard going. About 3 miles from our night camp we crossed a big branch of the Beach, with running water, which Chapman calls Falls Ck. The old battery site on the Beach was reached about 1 o'clock, and we off loaded down in the channel, in the edge of the tall floodbank reinforcement. A good camp site, offering shade, and shelter from the strong sea wind.

The horses, in charge of Willie, Alf Young, arrived about 7:30. Willie Alf had taken the Blue Mountains road, traveling until after dark the night before, and lost a horse carrying a packsaddle. Questioned on his horse count, he insisted that he had left Coen with 3 packhorses. He was just as positive that he had lost only one horse. But he arrived with 3 packhorses and four riding horses, not including the horse he himself rode.

Sent word by Thompson by the truck driver re the lost horse or horses and asked for the number to be made up to the five packhorses.

It did not occur to us to make a detailed examination of the saddlery before the truck left to return to Coen. When I looked over the gear I found we had but one surcingle for three pack outfits, and two sets of riding girths instead of three. The horses are not in very good condition, and all of them have needle sores or girth galls. Our rocky Torres venture is getting off to a bad start.

Yesterday, with Willie Alf Young as guide for the first part of the way, Dempsey and I rode toward the rocky to examine the country and see the track over which our transport will travel. Left camp at 7:45 and got back at 4:45. Traveling was good most of the way, and neither of us suffered much from the ride.

Followed the Beach (really a big tributary, called Romano Ck. according to Willie Alf) down about a mile, then crossed to a cattle yard and rubbish heap on the north bank, where we struck the old trail leading inland due west to the foot of the mountains. The main old blazed trail we had followed from Groll Ck. to a mile or so below our camp on Romano Ck. The long detour, west and then east, was to dodge a spur ridge carrying scrubby vegetation too thick to get through with horses, according to Willie Alf.

Aug. 12 (Cont'd)

Left the cattle yard on Bonanza Ck. at 8:25. Fairly flat box, bloodwood and ironbark country for about 2 miles to the foot of the range, with the low scrubby spur (carrying a type of monsoon forest) on our right. At 9:25, at 1200 ft., we dropped into the valley of a branch of the Bonanza, and stopped to drink at a sandy pool in the bed of the creek. Open eucalyptus savanna forest, and off to the left, at about our level, several tall hoop pines (Araucaria Cunninghamii) towering high above the other trees. A low elevation for hoop pine. Elevation by aneroid on return journey, 1300 ft.

At 9:55 we crossed another branch of the Bonanza at 1420 ft., with more hoop pines. At 10:40 reached a lookout on a 1750 ft. hill (1830 ft. on return trip), from which we looked down into Camp Oven Pocket, and across the nearly level top of the range to a high ridge, about 6 miles to the east, which Willie Alf said rises above the old Lakeland battery site on the Leo, on the eastern fall of the range. Travel across the range looked easy from our vantage point. Country near at hand a mixture of rainforest and savanna-forest, changing to solid rainforest about two miles to the east.

Dropped down through a strip of cool rainforest to the bottom of Camp Oven Pocket; reached at 10:45 (alt. 1400 on way out, 1480 and 1500 on return). Small rocky creek of flowing water with a narrow fringe of rainforest and big hoop pines on its banks at the crossing. Here Willie Alf left us on a long ride to hunt for the lost packhorse down on the plains, and pathfinding fell to me.

About 11 o'clock we started on. Crossed 3 streams in rainforest and passed through several savanna-forest pockets in which red stringy bark (or Syncarpia?) was a prominent big tree. At 11:50, at the west edge of a patch of scrub, came to a tree marked "J.A." at 1760 ft. Turned back at 12:20, in a nearly level savanna forested pocket at 1780 ft. Lunched at the creek in Camp Oven Pocket.

The ride from camp on Bonanza Ck. to our turning-back point took 4 hrs. 45 min. Estimated time for packhorses to that point, 5½ hours. Estimated packhorse time on to Lakeland's battery on the Leo, 2 to 3 hours (pretty much of a guess). Travel time for the packs will depend largely on the going through the big scrub on top of the range, which I think begins very close to our turning-back point. A small convoy of army trucks, making an astounding journey during the war, followed the old pack trail over the range, and cut a track wide enough for their vehicles to pass through the scrub. Trees have fallen since then and vines and young growth have partly closed the rainforest trails in places. George and I made track as far as we went. I also blazed trees as I rode along through the savanna forest.

On the way back to camp I decided to try to eliminate the big two to three mile detour on the first part of the route. Struck for camp from the last mountain ridge at about 1100-1200 ft., and soon broke through the thick vegetation.

This morning George, Don and my Willie (on special loan because George cannot get much good out of his own boys), guided by Willie Alf, and with the three packhorses carrying 150 to 180 lb. loads, left at 9:10 to cross the range and establish camp on Leo Ck. or the best site offering. My Willie is not much of a horseman, as far as I know; which leaves Willie Alf the only man in the party able to take care of the pack outfit.

After seeing the pack train away, I took Geoff and blackboy Roy and opened up the shortcut explored yesterday. This will mean a big saving in time and distance on the packing trips. The new track runs in a general direction of a little east of north and joins the old track in a mile or a bit more.

Left the cattle yard on Bonanza Ck. at 8:25. Fairly flat box, bloodwood and iron-bark country for about 2 miles to the foot of the range, with the low scrubby spur (carrying a type of monsoon forest) on our right. At 8:45, at 1200 ft., we dropped into the valley of a branch of the Bonanza, and stopped to drink at a sandy pool in the bed of the creek. Open eucalyptus savanna forest, and off to the left, at about our level, several tall hoop pines (Araucaria cunninghamii) towering high above the other trees. A low elevation for hoop pine. Elevation by aneroid on return journey, 1300 ft.

At 9:00 we crossed another branch of the Bonanza at 1820 ft., with more hoop pines. At 11:45 reached a lookout on a 1750 ft. hill (1850 ft. on return baly). From which we looked down into Camp Oven Pocket, and across the nearly level top of the range to a high ridge, about 8 miles to the east, which Willie Alf said rises above the old Lakeland Downs dairy site on the Leo, on the eastern fall of the range. Travel across the range looked easy from our vantage point. Country near at hand a mixture of rainforest and savanna-forest, changing to solid rainforest about two miles to the east.

Proceed down through a strip of cool rainforest to the bottom of Camp Oven Pocket; reached at 12:45 (alt. 1450, on way out, 1450 and 1500 on return). Small rocky creek of flowing water with a narrow fringe of rainforest and big hoop pines on the bank at the crossing. Here Willie Alf left us on a long ride to hunt for the lost pack-horse down on the plains, and pack-hunting fell to me.

About 1 o'clock we started on. Crossed 4 streams in rainforest and passed through several savanna-forest pockets in which red stringy bark (or Syncarpia?) was a prominent big tree. At 1:50, at the west edge of a patch of scrub, came to a tree marked "L.", at 1750 ft. Turned back at 2:20, in a nearly level savanna forested pocket at 1750 ft. Lunched at the creek in Camp Oven Pocket.

The ride from camp on Bonanza Ck. to our turning-back point took 4 hrs. 45 min. Estimated time for packhorses to that point, 5½ hours. Estimated packhorse time on to Lakeland's dairy on the Leo, 2 to 3 hours (pretty much of a guess). Travel time for the packs will depend largely on the going through the big scrub on top of the range, which I think begins very close to our turning-back point. A small convoy of army trucks, making an astounding journey during the war, followed the old pack trail over the range, and cut a track wide enough for light vehicles to pass through the scrub. Trees have fallen since then and vines and young growth have partly closed the rain-forest trails in places. George and I made track as far as we went. I also blazed trees as I rode along through the savanna forest.

On the way back to camp I decided to try to eliminate the big two to three mile detour on the first part of the route. Struck for camp from the last mountain ridge at about 1100-1200 ft., and soon broke through the thick vegetation.

This morning George, Don and my Willie (on special loan because George cannot get much good out of his own boys), guided by Willie Alf, and with the three packhorses carrying 150 to 160 lb. loads, left at 8:10 to cross the range and establish camp on Leo Ck. or the best site offering. My Willie is not much of a horseman, as far as I know; which leaves Willie Alf the only man in the party able to take care of the pack outfit.

After seeing the pack train away, I took Geoff and blackboy Joy and opened up the shortcut explored yesterday. This will mean a big saving in time and distance on the packing trips. The new track runs in a general direction of a little east of north and joins the old track in a mile or a bit more.

Friday, Aug. 13:

Prepared a few plants collected about camp by Willie while I was away in the mountains two days ago, and was barely out of camp, hunting for more plants, when a team of horses arrived from Coen. Thompson had sent two more packhorses in charge of three blackboys. This brings our packhorse team up to five horses and saddles, 2 sets of pack bags, and 3 sets of sling straps. We still have but 2 surcingles for the 5 pack outfits, but will be able to get along with makeshifts. The arrival of the two extra horses puts a new complexion on our move into and out of the Rocky. Barring accidents, such as lost horses, or lamed horses, (none of our horses are shod), we will have ample transport.

Bonanza Ck., on short inspection, looks the worst place yet for plants. Some nice tall mixed rainforest of Leichhardt trees, Syzygium, etc. is developed to a depth of up to 100 yds. along the banks of the creek where the soil is greyish and hard packed. Practically no undergrowth in this forest as a rule. A large feather palm (same sp. as big palm of Gordon's Ck.) gives a touch of luxuriance to a forest otherwise rather temperate in appearance. Rustling dry leaves on the ground; a little grass; clear boled trees well spaced; closed canopy; general appearance reminiscent of scenes in the New Forest.

A type of monsoon forest, now almost leafless (Bombax in flower, Albizzia, and most characteristic of all trees a small Desomdium with yellowish soft bark) occupied dry erosion hollows and gullies along the creek and extends in partial cover up the sides of the dry granitic hills.

The horses returned from the Leo a bit before 7 P.M. Letter from George giving details of the trip. They are camped at Lakeland's old battery site on the Claudie Ck., tributary of the Leo. A lovely spot, says George, with a waterfall close by, and planting of mangoes and limes. The roof of the old galvanized iron hut has fallen in. Good fine weather. On the way up they did some track clearing and camped in the big scrub on top of the range, sending the horses back to grass in the last pocket (the "farthest point" of George and I on Wednesday). Reached the battery at 12:30 or 1 o'clock today.

George has no watch. Nor have I. Have lost my watch again; most likely for good and all this time. Was carrying it in the fob pocket of my trousers on the reconnaissance trip of Wednesday. The stitching of the pocket gave out, and the watch fell somewhere along the way. I hated to lose that watch. Bought it in Java in 1939, and it always kept splendid time.

Saturday, Aug. 14:

Sedond party for the Leo, consisting of Van, Geoff and blackboy Roy, left at 8:30 with five packhorses carrying lighter loads than those of yesterday. Willie Alf expects to deliver his charges and get back here this evening. Van sits a horse well. Geoff is no rider. Inexperienced riders give a horse a hard time on mountain trails such as these.

Later: Horses returned about 7 PM in the moonlight. Another horse short. On the way back, while still on the Range east of Camp Oven Pocket, reports Alf, one of the two new packhorses came in contact with a wasp's nest, bolted, and went bush. Alf went back along the trail after eating and returned to camp about midnight, having failed to find tracks of the horse.

The cook sick with a bad cold, but stayed up baking bread until 11:30. Blackboy Moreton also on the sick list. Pains in back and the miseries. Says that some time back he got drunk, "not proper trunk", fell in the fire, burned both shoulders, and as a result has a bad heart.

Friday, June, 12:

Prepared a few plants collected about camp by Willie while I was away in the mountains two days ago, and was barely out of camp, hunting for more plants, when a team of horses arrived from Coen. Thompson had sent two more packhorses in charge of three blackboys. This brings our packhorse team up to five horses and saddles, 5 sets of pack bags, and 3 sets of sling slungs. We still have but 2 sureingles for the 5 pack saddles, but will be able to get along with makeshifts. The arrival of the two extra horses gave a new complexion on our move into and out of the Peak. Barring accidents, such as lost horses, or lamed horses, (none of our horses are shod), we will have ample transport.

Romanes Ck., on short inspection, looks the worst place yet for plants. Some nice tall mixed rainforest of deciduous trees, Syzygium, etc., is developed to a depth of up to 100 yds. along the banks of the creek where the soil is greyish and hard wooded. Practically no undergrowth in this forest as a rule. A large feather palm (same sp. as big palm of Gordon's Ck.) gives a touch of luxuriance to a forest otherwise rather temperate in appearance. Rustling dry leaves on the ground; a little grass; clear boled trees well spaced; closed canopy; general appearance reminiscent of scenes in the New Forest.

A type of monsoon forest, now almost leafless (Bombax in flower, Alphitonia, and most characteristic of all trees a small Pseudomiun with yellowish soft bark) occupied dry erosion hollows and gullies along the creek and extends in partial cover up the sides of the dry granitic hills.

The horses returned from the bay a bit before 7 P.M. Letter from George giving details of the trip. They are camped at Lakeland's old battery site on the Jardine Ck., tributary of the Bay. A lovely spot, says George, with a waterfall close by, and clumping of mangoes and limes. The roof of the old galvanized iron hut has fallen in. Good fine weather. On the way, they did some track clearing and camped in the big scrub on top of the range, sending the horses back to grass in the last pocket (the "furthest point" of George and I on Wednesday). Reached the battery at 12:30 or 1 o'clock today.

George has no watch. Nor have I. Have lost my watch again; most likely for good and all this time. Was carrying it in the fob pocket of my trousers on the reconnaissance trip of Wednesday. The stitching of the pocket gave out, and the watch fell somewhere along the way. I hated to lose that watch. Bought it in Java in 1930, and it always kept splendid time.

Saturday, June, 13:

Second party for the Bay, consisting of Van, Geoff and Blackboy Roy, left at 8:30 with five packhorses carrying lighter loads than those of yesterday. Willie AIF expects to deliver his dispatches and get back here this evening. Van rides a horse well. Geoff is no rider. Inexperienced riders give a horse a hard time on mountain trails such as these.

Later: Horses returned about 7 PM in the moonlight. Another horse short. On the way back, while still on the Romanes east of Quinquiven Pocket, reports AIF, one of the two new packhorses came in contact with a wasp's nest, bolted, and went bush. AIF went back along the trail after setting and returned to camp about midnight, having failed to find tracks of the horse.

The cook sick with a bad cold, but slaves up baking bread until 11:30. Blackboy Morrison also on the sick list. Pains in back and the muscles. Says that some time back he got drunk, "not proper trunk", fell in the fire, burned both shoulders, and as a result has a bad heart.

Sunday, Aug. 15:

Started for the Leo about 8:30 with Willie Alf and four packhorses. Start somewhat delayed by search for the horse Willie Alf road last night. Too tired, perhaps, to care about joining the belled (?) horses when let go. Moreton still below par. Took him along the trail about 1½ hours ride to pick up the tracks of the lost pack horse and try to follow it.

Arrived at camp on the Leo at 1:40. Good trip but for little incidents with the pack horses. Two horses loaded each with two 50-53 lb. boxes of plant dryers provided most of the incidents. The lods were wide though light in weight. One horse was an hour or two along the trail before he learned to dodge trees. The other plant box horse - a rogue mare - never did learn to judge the width of her load. Hit trees all the way and there were plenty of them. Broke the suspending chain of one of the sling straps, but the boxes stood the test. A tribute to a good job done by Winston Kelsey and Charlie Rucker back on the station in Florida.

Our camp in the Rocky Scrub is at about 1350 ft. (my aneroid) on Claudie Ck., a tributary of Leo Ck., which flows into the Nesbit River. We are camped about 100 yds. above the site of Lakeland's old battery, on what was probably the site of Lakeland's house. Galvanized iron has been rebuilt into a small hut, which in turn has lost its roof by collapse of the timbers. Salvaged iron is being used by us for work tables, and by our boys for beds. A rather extensive clearing along the creek has been mostly reclaimed by forest regrowths. Only a very small open space remains. Old mango and lime trees stand in the forest regrowths and on the edges of the little grassy clearing. Blady grass (Imperata) and Mackie's Curse (Chrysopogan acicularis), both sterile, occupy the open ground. Hard by the flys is a grove of old mango trees which someone has cut off about 3 ft. above ground. From the thick stumps, grey-white coppice shoots have grown to a height of 30 ft. and spreading a little and clear underneath, they look very like silver birch in the lamplight. Pineapples grow thin and tall in the second growth forest, maintaining their planted rows, but otherwise looking like primitive grey-green bromeliads. Where the pineapples have some sunlight they flower. They bear no fruit - at least at this season. Rather remarkably for a site on which a white woman lived for years and had children, there is no evidence of old ornamental plantings. Mangoes, pineapples and limes.

The Lakelands, according to Willie Alf, had two children, Leo and Claudie. The creek we are camped on was named after Claudie. The Leo, into which the Claudie flows, bears the name of the other Lakeland son.

Tuesday, Aug. 17:

When I came up here two days ago, Don Vernon asked to be sent back to the Peach Camp as soon as possible. His departure from the Peach was hurried and he brought no traps. Wants mammals as well as birds. Getting few birds here, and will not take the loan of traps. Stubborn fellow, but honest.

As it develops, it suits well for Don to return to the Peach right now. He left this afternoon. The lost, wasp-stung packhorse has not been found. Willie Alf and Moreton, __?__ Alf, here with cooked food this noon, spent all of yesterday hunting for it and got only tracks, not very far from where the horse went bush.

Don's return today will allow us to move back to the Peach in two packhorse trips, if we abandon some stores. There will be some tough going if we lose any more horses.

George's ever present desire to sample, rather than collect thoroughly, has also manifested itself and I have agreed to the mammal staff going back along the track a few milesto establish another camp on the 19th. The second mammal camp for this area will be at a higher altitude than the present one. George wants to see the country

Sunday, Aug. 16:

Started for the Leo about 6:30 with Willie Alf and four packhorses. Started somewhat delayed by search for the horse Willie Alf road last night. Too tired. Perhaps, to care about joining the belled (?) horses when left go. Moreton still below me. Took him along the trail about 1½ hours ride to pick up the tracks of the lost pack horse and try to follow it.

Arrived at camp on the Leo at 1:40. Good trip but for little incidents with the pack horses. The horses loaded each with two 50-65 lb. boxes of plant drys provided most of the incidents. The loads were wide though light in weight. One horse was an hour or two along the trail before he learned to nudge trees. The other plant box horse - a rogue mare - never did learn to judge the width of her load. Lit three at the way and there were plenty of them. Broke the suspending chain of one of the sling straps, but the boxes stood the test. A tribute to a good job done by Hinson Kiser and Charlie Rucker back on the station in Florida.

Our camp in the pecky cypress is at about 1250 ft. (by aneroid) on Claudie Cr., a tributary of Leo Cr., which flows into the Mosquito River. We are camped about 100 yds. above the site of Bakeland's old battery, on what was probably the site of Bakeland's house. Galvanized iron has been rebuilt into a well but, which in turn has lost the roof by collapse of the timbers. Galvanized iron is being used by us for water tables, and by our boys for beds. A rather extensive clearing along the creek has been mostly reclaimed by forest regrowth. Only a very small open space remains. Old mango and lime trees stand in the forest regrowth and on the edge of the little grassy clearing. Blady grass (Imperata) and Meekie's Curse (Thrasopsis scirpoides), both sterile, occupy the open ground. Here by the lime is a grove of old orange trees which someone has cut off about 3 ft. above ground. From the thick stumps, grey-white coppice shoots have grown to a height of 30 ft. and spreading a little and clear underneath. They look very like silver birch in the twilight. Pineapples grow thick and tall in the second growth forest, maintaining their pinked rows, but otherwise looking like primitive grey-green bromeliads. Where the pineapples have some sunlight they flower. They bear no fruit - at least at this season. Rather remarkably for a site on which a white woman lived for years and had children, there is no evidence of old ornamental plantings. Mangoes, pineapples and lime.

The Bakelands, according to Willie Alf, had two children, Leo and Claudie. The creek we are camped on was named after Claudie. The Leo, into which the Claudie flows, bears the name of the other Bakeland son.

Tuesday, Aug. 17:

When I came up here two days ago, Tom Vernon asked to be sent back to the Peach Camp as soon as possible. His departure from the Peach was hurried and he brought no traps. Warbs handle as well as bridle. Getting few birds here, and will not take the loss of traps. Stubborn fellow, but honest.

As it develops, it suits well for Tom to return to the Peach right now. He left this afternoon. The local, hard-luck packhorse has not been found. Willie Alf and Moreton, 2 Alf, here with cooked food this noon, spent all of yesterday hunting for it and got only tracks, not very far from where the horse went bush.

Tom's return today will allow us to move back to the Peach in two packhorse trips, if we abandon some stores. There will be some tough going if we lose any more horses.

George's ever present desire to sample, rather than collect thoroughly, has also manifested itself and I have agreed to the mental start going back along the trail a few miles to establish another camp on the left. The second mental camp for this area will be at a higher altitude than the present one. George wants to see the country

Aug. 17 (Cont'd)

a third time before deciding. His main reason for wanting to go back to the top of the range where there is savanna-forest as well as rainforest, is to try for ECHIMIPERA, a New Guinea bandicoot which Darlington collected for MCZ in 1932. Darlington says he got it in the Rocky Scrub. We are in the Rocky Scrub - probably near the center of it - here on Claudie Ck. Darlington camped at this same camp, and as far as I know at no other place in the Rocky.

My own collecting has been progressing very well for ferns and mosses, not so well for other plants. Most rainforest plants are sterile. There is a good flora in well-developed rainforest of limited extent on flattish terraces above the creek banks. The slopes and crests of the terraces above the creek banks. The slopes and crests of the ridges carry poor rainforests in which scrub hickory ~~ridges carry poor rainforests~~ (Acacia) sure indicator of dryish conditions, is abundant. Have collected as many plants as I can handle from short excursions down the creek 1/4 mile yesterday;up the creek a like distance today.

Wednesday, Aug. 18:

Collected a poor gathering in 4½ hours on the ridge back along the trail. Conditions evidently too dry for full development of rainforest. Scrub hickory much in evidence. Long-leaved Podocarpus 19922, a common tree under improved conditions.

About 300 ft. above camp (ca. 1650 ft.), and 20 minutes walk, the trail branches. Our camp is at the end of the southern branch. The northern branch, now pretty well-overgrown, is said to lead down to a grassy pocket, 3 miles distant - Neville Pocket - where cattle were grazed and slaughtered in the old gold mining days. A tall old mango tree, its trunk scarred by axe gashes, grows in the fork of the trails, and there are many shallow mine workings thereabouts.

Geoff is having a thin time for insects. Cannot even get spiders with a lamp at night. Flying creatures are few. Weather too clear and cool perhaps.

Temperature at 6:30 AM is 58-59 F. Maximum --- ?

Monday Aug. 23:

Back in camp at Bonanza (or is it Pinanza?) Ck., on the Peach. With Geoff and Willie, I returned here yesterday. We were the last to leave the camp at Lakeland's battery site on the Leo. George, Van and blackboy Roy, were moved back along the trail on the 19th to Campoven Pocket, about 2½ hours with packhorses. They established camp (1500 ft.) on the pine fringed creek where George and I ate lunch on our reconnaissance trip on the 11th.

On the 19th I collected down the creek a short distance and found the forest deteriorating. Got only a small gathering. About as many plants as I needed, for an improvised drying frame I made of sticks and a swag cover, did not work well, and throughout my stay in the Rocky I had trouble in getting plants dried.

On the 20th I made a long excursion up the creek and found there some very luxurant forest in moist gullies and moderate slopes. Went upstream about a mile. About 1/2 mile or a little less above camp the creek forks, the main stream, which I followed, coming from the lefthand side (east or coastal side). Within 1/4 mile, above a deep rock pool, is a waterfall about 30-40 ft. high. As far as I went, gum-barked Tristania ? (first met with on the West Claudie River), fringes the creek, its big grey trunk, and scrolled bark, giving it the appearance of a eucalypt.

a third time before sodding. His main reason for wanting to go back to the top of the range where there is savanna-forest as well as rainforest, is to try for MONILIFORMA, a New Guinea bandicoot which Darlington collected for MCZ in 1933. Darlington says he got it in the Rocky Corrh. We are in the Rocky Corrh - probably near the center of it - here on Claudie Ck. Darlington camped at this same camp, and as far as I know at no other place in the Rocky.

My own collecting has been progressing very well for ferns and mosses, not so well for other lands. Most rainforest plants are sterile. There is a good flora in well-developed rainforest of limited extent on flatish terraces above the creek banks. The slopes and crests of the terraces above the creek banks, the slopes and crests of the ridges carry poor rainforests in which sclerophyll ~~rainforests~~ (Acacia) sure indicator of dryish conditions, is abundant. Have collected as many plants as I can handle from short excursions down the creek 1/4 mile yesterday; up the creek a like distance today.

Wednesday, Aug. 18:

Collected a poor gathering in 4½ hours on the ridge back along the trail. Conditions evidently too dry for full development of rainforest. Scrub hickory much in evidence. Long-leaved Podocarpus 1932?, a common tree under improved conditions.

About 500 ft. above camp (or 1800 ft.), and 30 minutes walk, the trail branches. Our camp is at the end of the southern branch. The northern branch, now pretty well-overgrown, is said to lead down to a grassy pocket, 3 miles distant - Devils Lookout - where cattle were grazed and slaughtered in the old gold mining days. A tall old mango tree, its trunk scarred by axe marks, grows in the fork of the trails, and there are many shallow mine workings thereabouts.

Geoff is having a rough time for insects. Cannot even get indoors with a lamp at night. Flying creatures are few. Weather too clear and cool perhaps.

Temperature at 6:30 AM is 55-60 F. Maximum --- ?

Monday Aug. 22:

Back in camp at Pomona for in it minerals? Ok., on the Beach. With Geoff and Phillie, I returned here yesterday. We were the last to leave the camp at Leichhardt's battery site on the Lith. George, Van and Blackboy Roy, were moved back along the trail on the 14th to Campover pocket, about 2½ hours with packhorses. They established camp (1500 ft.) on the pine fringed creek where George and I ate lunch on our reconnaissance trip on the 11th.

On the 14th I collected down the creek a short distance and found the forest deteriorating. Got only a small gathering. About as many plants as I needed, for an improvised drying frame I made of sticks and a sweat cover, did not work well, and throughout my stay in the Rocky I had trouble in getting plants dried.

On the 20th I made a long excursion up the creek and found there some very luxuriant forest in moist gullies and moderate slopes. Went upstream about a mile. About 1/2 mile or a little less above camp the creek forks, the main stream, which I followed, coming from the leftbank side (east or coastal side). Within 1/4 mile, above a deep rock pool, is a waterfall about 35-40 ft. high. Far as I went, gum-barked Tristania ? (first met with on the West Claudie River), fringes the creek, its big grey trunk, and scrolled bark, giving it the appearance of a eucalypt.

Aug. 23 (Cont'd)

My collecting on the Claudie was cut short by an attack of 'flu which laid me low on the afternoon of the 20th, and from which I am starting to recover today. I did not much enjoy the 4½ hour ride back to this camp yesterday.

My total collection from the Rocky was 128 numbers. But for ferns and mosses, for which this has been my richest camp so far, the plant collection would have been poor. The season was wrong for rainforest plants. Saw many species which I could not collect. Should say that in the proper season a good collection of small trees could be made. Canopy species seem to be few. Palms abound in numbers of individuals and excluding Calamus, 8 spp. were seen and 4 spp. collected. Abundant all through the forest is a fan palm (Licuala) apparently con-specific with the sp. collected at Iron Range. An Archontophoenix occurs in gullies up the creek. A big feather palm by the waterside is the same as one got on Bonanza and Gordon Creeks.

In ferns, a small treefern (Cyathea), like a sp. got on Tozer Range and in the mountains near Cairns, is abundant and conspicuous. Most inconspicuous and perhaps a real prize, is a tiny Schizaea-like thing (19963), like a blade of grass 3-cleft at the top, growing on a mossy log beside the creek.

Don got few birds. They were there in plenty but cover was thick and birds were not easy to get. Geoff's insect collection was poor. Night flying things were very few until the last night or two when partly cloud and warmer conditions brought more satisfactory catches at the lamp.

Slightly more than 100 mammals were taken at the two camps. A large Melomys from the Claudie might be new. Antechinus and Rattus made up most of the catch at the Claudie. Sminthopsis, representing a southern extension of range of the species taken at Iron Range (and on into New Guinea, was trapped in the grass at Campoven Pocket. Bats include Nyctophilus and Mineopteris?, new to the collection; more Rhinoplophus seemani, Scoteinus, etc. Bats were taken by netting a fly-way tunnel in rainforest above the Claudie camp, and by shooting.

George, Van and Roy returned here about 1:30 this afternoon. Thus ended our trip into the Rocky Scrub. Thompson's truck should be here this evening or tomorrow morning to take us back to Coen.

At this camp, since his return, Don has taken a good lot of birds and has added 6 brown cus-cus and one spotted cus-cus to his mammal collection. I should like to see more brown cus-cus in our collection. We have only one from here, and I think two from Iron Range.

Don's best take here was an Acrobates, taken in a trap this morning. This is the second specimen of that tiny arboreal marsupial taken on the expedition. The first was shot by Van, then swallowed by a snake at Newcastle Bay. Now we have the second, caught in a rat trap set on the ground!

Willie Alf Young has done a good job handling the horses and packing for us. Fortunately for his record, somewhat tarnished by the loss of one pack horse on the way out from Coen, the second lost horse came back to camp of its own accord after being away for a couple of days. The horses are in almost as good condition as when we got them, and they show fewer sore backs and girth galls. But after I went up top Alf fired most of the grass along the trail. It was against instructions, but in this country everyone burns grass, and Alf's action did clear the trail and make his one-man trips easier.

About the only bit of unburned grass in the mountains this side of Campoven Pocket was where I lost my watch on the 11th. This morning I told Alf to drop matches into that, and search again for the watch. No result.

My collecting on the Claudie was cut short by an attack of 'flu which laid me low on the afternoon of the 20th, and from which I am starting to recover today. I did not much enjoy the 4½ hour ride back to this camp yesterday.

My total collection from the Rocky was 192 numbers. But for ferns and mosses, for which this has been my richest camp so far, the plant collection would have been poor. The season was wrong for rainforest plants. Far many species which I could not collect. Should say that in the proper season a good collection of small trees could be made. Canopy species seem to be few. Palms abound in numbers of individuals and excluding Calamus, 3 spp. were seen and 4 spp. collected. Abundant all through the forest is a fan-palm (Licuala) apparently con-specific with the sp. collected at Iron Range. An Archontophoenix occurs in gullies up the creek. A big feather palm by the waterside is the same as one got on Pormene and Gordon Creeks.

In ferns, a small tree-fern (Cyathea), like a sp. got on Tozer Range and in the mountains near Cairns, is abundant and conspicuous. Most income income and verbena a real prize, is a tiny sphagnum-like thing (Isoëtes), like a blade of grass 3-4inch at the top, growing on a mossy log beside the creek.

Don got few birds. They were there in plenty but cover was thick and birds were not easy to get. Geoff's insect collection was poor. Night flying things were very few until the last night or two when partly cloud and warmer conditions brought more satisfactory catches at the lamp.

Slightly more than 100 specimens were taken at the two camps. A large Melomys from the Claudie might be new. Antechinus and Rattus made up most of the catch at the Claudie. Sminthopsis, representing a southern extension of range of the species taken at Iron Range (and on into New Guinea), was trapped in the grass at Cooktown pocket. Rats included Uromys and Mimomyscus, new to the collection; more Rhinolophus species, Pteropus, etc. Bats were taken by netting a fly-way tunnel in rainforest above the Claudie camp, and by shooting.

George, Wan and Boy returned here about 1:30 this afternoon. Thus ended our trip into the Rocky Scrub. Thompson's truck should be here this evening or tomorrow morning to take us back to Coen.

At this camp, since his return, Don has taken a good lot of birds and has added 6 brown cus-cus and one spotted cus-cus to his mammal collection. I should like to see more brown cus-cus in our collection. We have only one from here, and I think two from Iron Range.

Don's best take here was an Acrobatus, taken in a trap this morning. This is the second specimen of that tiny arboreal marsupial taken on the expedition. The first was shot by Van, then swallowed by a snake at Newcastle Bay. Now we have the second, caught in a rat trap set on the ground!

Willie Ah Young has done a good job handling the horses and packing for us. Fortunately for his record, somewhat tarnished by the loss of one pack horse on the way out from Coen, the second last horse came back to camp of its own accord after being away for a couple of days. The horses are in almost as good condition as when we got them, and they show fewer sore backs and girth galls. But after I went up top Ah Ah fired most of the grass along the trail. It was against instructions, but in this country everyone burns grass, and Ah's action did clear the trail and make his one-man trips easier.

About the only bit of unburned grass in the mountains this side of Pampoven Pocket was where I lost my watch on the 11th. This morning I told Ah to drop matches into that, and search again for the watch. No result.

Aug. 23 (Cont'd)

Following is a record of distances and altitudes made on the trip from Lakeland's Battery yesterday. Altitudes by my aneroid; time by Geoff's watch:

1:40 Left camp at Lakeland's old battery site on Claudie Ck. Alt. 1400'.

2:08 Mango tree at fork of trails. Alt. 1800'.

2:28 First small creek; Nesbit water. 1680'.

2;33 2nd. small creek; Nesbit water. 1700'.

3:00 Larger creek (George, Don and Willie camped here on outward trip); Nesbit water. 1800'

3:07 2nd larger creek. 1800'.

(Note: Elevations of 1850' noted between 2nd small creek, Nightcamp Ck., and 2nd large creek).

3:15 East edge of 1st grass pocket, and end of continuous rainforest of the Rocky Scrub. 1800'. Teatree and Casuarina. Poor grass.

3:20 West edge of 1st pocket. 1780'.

3:22 East edge of 2nd pocket. Red stringy-bark first appears here.

3:24 West edge 2nd pocket.

3:25 East edge 3rd grass pocket. 1800'. Red stringy-bark and some grass tree. Good grass for horses at lower end. Alf camped here with horses when first party camped farther on in rainforest on way to Lakeland's battery. Remains of a large packing case probably indicate that military MP party camped here during war.

3:30 West edge of 3rd grass pocket.

Many fanpalms on small creek in rainforest strip, and detour where a horse was bogged in a pig wallow on trip of first party.

3:35 East edge of 4th grass pocket. J.A. Tree. 1800'. Timber largely red stringy and Casuarina.

In this pocket a hill with rocky crest and much Casuarina 1830'.

3:44 West edge of 4th grass pocket. 1800'.

3:46 East edge of 5th grass pocket. Pocket begins as a long narrow strip on a ridge crest, and widens lower down. Timber mainly swamp mahogany and casuarina. Willie Alf Young calls this Peach Pocket, and gives the same name to all the pockets east.

4:00 Mammal collecting camp in Campoven Pocket. 1500'. George and I lunched here on the 11th. Rocky creek, narrowly fringed with rainforest containing tall old hoop pines, separates Campoven Pocket from Peach Pocket No. 1.

4:20 Left mammal camp.

Following is a record of distances and altitudes made on the trip from Lakeland's Battery yesterday. Altitudes by my aneroid; time by Geoff's watch:

1:40 Left camp at Lakeland's old battery site on Glencin Ck. Alt. 1400'.

2:00 Mango tree at fork of trails. Alt. 1800'.

2:20 First small creek; Nesbit water. 1880'.

2:35 2nd. small creek; Nesbit water. 1700'.

3:00 Larger creek (George, Tom and Willie camped here on outward trip); Nesbit water. 1800'

3:07 2nd larger creek. 1800'.

(Note: Elevations of 1880' noted between 2nd small creek, Nightcamp Ck., and 2nd large creek).

3:15 East edge of 1st grass pocket, and end of continuous reinforced of the Moody Scrub. 1800'. Pertree and Casuarina. Poor grass.

3:20 West edge of 1st pocket. 1780'.

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3:24 West edge 2nd pocket.

3:25 East edge 3rd grass pocket. 1800'. Red stringy-bark and some grass trees. Good grass for horses at lower end. All camps here with horses (non first party) camped further on in reinforced on way to Lakeland's battery. Remains of a large packing case probably indicate that military ~~M~~ party camped here during war.

3:30 West edge of 3rd grass pocket.

Many kangaroos on small creek in reinforced strip, and detour where a horse was bogged in a pig wallow on trip of first party.

3:35 East edge of 4th grass pocket. 1.A. Tree. 1800'. Timber largely red stringy and Casuarina.

In this pocket a hill with rocky crest and rush Casuarina 1880'.

3:44 West edge of 4th grass pocket. 1800'.

3:46 East edge of 5th grass pocket. Pocket begins as a long narrow strip on a ridge crest, and widens lower down. Timber mainly grey mahogany and casuarina. Willie Alf Young calls this Reed Pocket, and gives the same name to all the pockets east.

4:00 Normal collecting camp in Campoven Pocket. 1800'. George and I lunched here on the hill. Rocky creek, narrowly fringed with reinforced containing tall old hoop pines, negrecles Campoven Pocket from Reed Pocket No. 1.

4:20 Left normal camp.

Aug. 23 (Cont'd)

4:25 Edge of rainforest strip. 1700'.

~~Lookout, where my watch was lost. 1840'.~~

4:30 Upper edge of rainforest strip. 1750'.

Lookout, where my watch was lost. 1840'.

4:55 Dry, stoney, rainforested gully, with hoop pines. 1450'.

5:20 Sandy, teatree creek (first water on trail from Bonanza Ck.). Hoop pines off to north. Grass tree plentiful in open forest. 1300'.

5:37 Crest of leading spur fronting open valley of lower Peach. 1220'.

5:50 Turn-off of my new shortcut trail from old trail. 1000'.

6:20 Camp on Bonanza Ck. Dusk.

Total travel time - 4 hrs. 20 min. Estimated distance 9-10 miles.

4:25 Edge of reinforest strip. 1750'.

~~Market, where [illegible] forty [illegible]~~

4:30 Upper edge of reinforest strip. 1750'.

Lookout, where my watch was lost. 1860'.

4:35 Dry, stony, reinforested gully, with hoop pines. 1650'.

5:20 Sandy, tortree creek (first water on trail from Pomona CK.). Hoop pines off to north. Grass tree beautiful in open forest. 1200'.

5:27 Crest of leading spur fronting open valley of lower Peach. 1280'.

5:50 Turn-off of my new shortcut trail from old trail. 1000'.

6:20 Camp on Pomona CK. Dusk.

Total travel time - 4 hrs. 10 min. Estimated distance 9-10 miles.

Wed. Aug. 25:

These are notes and memories written up on the 30th.

The 24th - the planned day of our return to Coen- was a day of preparation of specimens, and of suspense. I dried out plants brought back from the Rocky. The mammal men had two brown cus-cus and some flying foxes which they had jacked the night they came down from Campoven Pocket.

Half a day, or a day, matters nothing to people living in this timeless part of Australia. But when no truck arrived by lunch time, I began to think something had gone wrong. Took the boys along the road with shovels and axes to improve the crossings of gullies. And, expecting to hear the sound of an approaching motor every minute, we went back along the road three miles to the crossing of Falls Ck., repairing gully crossings, cutting out stumps, and filling holes dug by pigs since our passage out two weeks ago. Pigs had dug deep holes around the stubs of small living trees we had cut on the sandridges. My only guess at the reason for the pig rootings is that the cut stubs leaked sap and the pigs followed the wet soil in their diggings.

I sent the horses back to Coen on the 24th, so we were cut off from the outside. Decided to walk in to the airdrome where there is a telephone, and Geoff volunteered to go with me.

Joe gave us breakfast before daylight on the 25th and as day dawned we set out. An overcast, drizzling morning, which helped in our long walk. Kept a rough time and compass record of our hike, and drew a map of sorts as we went along.

At Fitz's Ck., about 16 miles from camp, we met Cecil Wilson with Thompson's truck, and Constable Maurice Radford and a couple of black-boys on board. Wilson sought to justify the delay by saying he had to take Lee Wassall down to Port Stewart to meet the fisheries exploration boat the day before yesterday. Wassall, son-in-law of Herb Thompson, and collector for the Biology Dept. of Queensland University, is attached to the fisheries expedition led by Marshall. He left the boat to come to Coen for the races - to cast off his shoes and help in the bar.

Geoff and I continued our walk, while the truck went on to the Peach to lift the rest of the party. We struck the north-south road about 11:45, rested a while, then walked three miles north to the airdrome. Geoff's feet gave out and the last part of the walk was slow. We walked in all 19 measured miles from the Peach Camp to the airdrome.

At the drome, Groundsman Ernie Armbrust and his wife made us very welcome, and we drank numerous cups of tea and ate much in the line of dainty cakes before Wilson called with the truck and the rest of the party about 4 o'clock. Before dusk we were back at The Bend, two miles out of Coen, and established for the night.

Thursday, Aug. 26:

Much of the day spent in Coen, settling business and talking to people about the country. Feeling miserable from the after effects of flu. and I suppose some fatigue from yesterday's long walk.

Aug. 26 (cont'd)

Got two more explanations for the day we lost through non-arrival of Thompson's truck at the Peach. Old Herb said they just plain forgot the day of the week. Police Sergeant Dan Farrell, who knows what goes on, and very plainly has no faith in Old Herb's veracity, reckoned that the truck was held a day so that on the way back from the Peach, it could call at the airdrome to pick up Mrs. Prideau, one of Thompson's daughters, who came in on yesterday's plane and was in fact met by the truck.

When we came to the point of talking business, Old Herb reckoned we owed him £30 for truck hire and £20 for the horses. I knew we were stuck and could not argue with the old fox. Sold him our surplys stores and wrote a check for £18-9-0 in settlement. We did not lose on the last part of the transaction.

Old Herb will be a man for any future scientific expedition to steer clear of. And I would say the same of his son-in-law, Wassall. Number one citizen of the township is Maurice Shephard - now 73 years of age, still running a trucking business between Coen and the coast but perhaps not much longer for this world. Mrs. May Armbrust, best business head in town, and apparently a square shooter, would be the best agent for the next visiting party. Mrs. A. has a store, is agent for Aust. National Airways, and has a cattle property and a butchering business. She is assisted by her daughter, Mrs. Taylor, married to a telegraph linesman.

Friday, Aug. 27:

Got a good start from the Bend, somewhat after eight, on the beginning of our road trip south to railhead at Laura on Hugh Fisher's truck. The truck a 4 x 4 "blitz buggy" with oversize - but still rather small - body.

Final business and goodbyes in Coen kept us until almost 10 o'clock, when we got away and headed south on the road - not on any map - leading through the old mining field of Ebagoolah. Some interest in town over the arrival last night of a Frenchman named Henri, and his companion, Miss Saunders, who came up from the Annie River landing on Maurice Shephard's truck. Henry somewhat of a mystery man to the locals. They have Miss Saunders summed up. Henri has a good-looking Swiss 35 mm movie camera with which he photographed our outfit. It is recalled in Coen that last year this same Frenchman was in Cooktown with another lady companion.

Monday Aug. 30:

Drove into Laura about 1 PM. Our night camps were Ebagoolah, Musgrave and the Hann River. Distance from Coen about 180 miles: Petrol consumption about 3 miles per gallon on first day, 4 to 5 miles for the rest of the trip. Actual distance must have been well over 180 miles. Distances in this country are reckoned by the marked mile posts on the telegraph line. Coen is said to be 167 miles from Laura by line. We left the line near Coen and did not strike it again until we got to the foot of the Dividing Range 12 miles north of Musgrave. From there we followed the line to Fairview, 12 miles out of Laura. A dreary trip. We made short stages to allow time for trapping and shooting and the preparation of mammal specimens en route. The usual travel time from Coen is 2½ days. Notes on the trip follow:

27th. Left Coen 1- am. Lunch on 12-mile Creek, 12 miles north of Ebagoolah. Arrived Ebagoolah 3:35, altitude variously 900 ft. to 700 ft. by aneroid. Broken ridgy country with granite rocks and quartz reefs, and mainly bloodwood and ironbark timber, from Coen to near the 12 Mile. Beyond that, mostly messmate ridges with fairly large trees and red soil. Good water in a spring-fed sandy hole in the 12 Mile. No one lives at Ebagoolah. Timbers of theold hotel, butcher shop, etc., still stand, and one small building of galvanized iron. Mango trees, bougainvillea, and a few other plantedthings still thrive. Clean, spacious sandy ridge. Fine site for a town. But the only water supply is from a shallow well on the edge of a teatree flat. We campedthere, beside the unoccupied camp of persons unknown, whose horses were hobbled on the flat. Fencing wire, and galvanized iron were stacked near their flys. Clear cold night and a heavy dew.

28th. Left Ebagoolah 8 am. Calledat Burns & Solomon's "Yarraden" cattle station (about 2 miles) with a telegram. Ronnie Solomon was cutting up fresh beef and gave us steak for our supper. Rough, crude, batchelor outfit.

14 miles suth of Ebagoolah we stopped at the old gold mining place of Yarraden to drop Dave Hartley, one of three partners who are beginning the reopening of the old Savannah mine. Gave Hartley a lift from Coen. A stokehold man on the steamer "Time". Says that like many men these days, he works only 9 months in the year for wages. Income tax payments are high and it does not benefit them to work more than nine months.

[illegible] miles farther on we stopped a few minutes at the camp of old Billy Burns at Speinkop. Burns, a hunchback, has worked free gold on the hill for years. Has recently sold his claim and camp to Jack Sweatman.

6 miles from Speinkop we came to the abandoned homestead of Bamboo Station. Stretched teatree country.

Top of the Dividing Range where we started down was 950 ft. Range of granite scarped to the east. To the west the country stretches for miles and miles without perceptible general fall. Foot of the range about 450 ft. above sea level. Descent steep in parts, but the road is quite passable for motor vehicles in good mechanical order. At foot of range we tried to find the blazed turn-off to a spring, about 1½ miles from the road, where rock wallabies are reported plentiful. Went on to the railman's camp, beside another spring which has dried up, where we arrived at 1:25 and had lunch with water carried on the truck.

Struck the telegraph line a mile or so on from our lunch camp and followed it to Musgrave, arriving at 3:45. For 20 years or more Musgrave has been closed as a telegraph station and used as homestead by "Uncle" Fred Shephard, owner of a cattle property ofconsiderable size. Uncle and his wife are famed for their hospitality to travelers. We camped beside a warm sulphur spring about 500 yds up the creek (Saltwater Ck.) from the homestead. Alt. 450 ft.

29th. Left Musgrave 8 am and camped on the north bank of the Hann River at 1 o'clock. Alt. 350 ft. Distance 40 miles by telegraph line from Musgrave. The Hann is a permanently running stream - the only one on the Princess Charlotte Bay watershed. Stream 10-15 yds. wide at the road crossing. Long, deep, dark hole of water a short distance above

the road, and a smaller hole below the road. River said to be full of fish, including big barramundi and freshwater sharks. Saw none, and Hughie, out for a feed of fish with a 303 rifle, came back empty handed. Nor did we see the freshwater and saltwater crocodiles which are reported to live in the big holes. The Hann is a fine water supply, running through poor sandy messmate country. Said to rise in several big springs in red sandy 'desert' (poorly grassed scrub) country about 20 miles above the road.

30th. Left Hann River 8:10 and arrived at Laura about 1:30. The last few miles of the road very dusty. So-called bull dust flats of grey soil, lightly timbered with teatree and with numerous magnetic anthills.

Stopped at a dry creek about a mile south of the Kennedy River to photograph and collect the great "Cabbage Palm" Corypha alata, growing in a sort of monsoon forest characterized by Terminalia sp. Unfortunately the palms were sterile. In Australia, Corypha is restricted to the lower Cape York Peninsula, and it seems that all previous records are from the western fall of the Peninsula.

A Main Roads construction party camped on the Little Laura River, working on a new low-level crossing. Main Roads is concentrating on river crossings on the road between PortlandRoads and railhead at Laura. It is the rivers that make travel impossible during the wet season. Efforts at road making in the vast stretches of the Peninsula seem punily inadequate. Finance is niggardly. I doubt if government is getting value for money spent on wages. Equipment is meagre and obsolete. A sorry show. The kind of thing that makes northerners boil over when they talk about the government.

Laura, on the LauraRiver, is terminus of a 67-mile (?) single track railroad which was thrust out toward the Palmer River goldfield in the 'seventies. The railroad had reached the Laura River when the lush days of the Palmer ended. An expensive concrete and steel bridge was completed across the river at about that time. One loco crossed the bridge. Laura has become the outlet for a great, sparsely occupied area of cattle and mining country. The town consists of a railroad goods shed, pub, store, and police station. I saw no private dwellings other than pensioners' shacks on the river. The bridge was carried away by a high flood about 1942. The two central piers broke off like carrots, at the same level above the river. No sign of reinforcing steel. Looks as if some engineer made a mistake in levels, and had extensions just mortared on top of the piers (or was reinforced concrete used in those days?).

In Laura I had several talks with Howell, who has pioneered tobacco growing in the neighborhood. Last year he had 16 acres under crop and topped the Australian market with his leaf. Howell, middle aged, has one son, who is in partnership with him. Howell senior was formerly in charge of tobacco experiments in Queensland for the CSIR. Liked Laura best of all the localities in which he had experimental plot, and when the Qld. govt. took over tobacco experiments from CSIR, he resigned and took up land there. Equable temperatures, and good type of soil, make Laura suitable for tobacco. Night temperatures never low enough for the reproductive processes of blue mold, from which the area is free. Tobacco does best on sandy messmate ridges, and is irrigated with water pumped from a hole in the river.

Tuesday Aug. 31:

Left Laura by rail motor at 12:30 and arrived in Cooktown about 4 pm. A very informal railroad. Bill Gladwell, stationmaster at Cooktown, drivesthe railmotor and controls the railroad. His only assistant seems to be a boy porter who helps in small ways. Traveling through the mountains, he slowed down to grab wildflowers for three war nurses who were making the round trip as tourists. When we were about to load our gear in the box-trailer at Laura, Bill hunted for a consignment note so that the shipment could be made in proper manner. No consignment note could be found on the railmotor (there is no station at Laura), so we agreed to fix the matter in Cooktown. Half way down Bill leaned back over his driving seat to ask if I really wanted to go through formalities re our gear. I said that was up to him. Whereupon Bill decided we were entitled to carry the whole lot (about 30 cwt.) as passenger's baggage.

Leaving Laura, the railroad soon leaves behind the sandy bloodwood and messmate country and enters a rangy area timbered with low teatrees and wattles of several spp forming dry scrubs. Rocks mainly sediments weathered down to leave scarped residual peaks. Shrub communities, which look as if they would be very interesting to collect in the wet season, occur on shallower soils over rocks. After leaving the mountains, the track crossed a ridgy coastal plain apparently with rainfall considerably higher than the country about Laura.

In Cooktown we stayed at the Commercial Hotel (managed by Mrs. Cotmore for Moffat Construction Coy.) and parked our gear in the back of Lewis' General Store. Lewis are our Cooktown agents. Spare gear and supplies sent down from Portland Roadsby boat awaited us in Cooktown, but we had left over from the Coen area practically all we needed for the final phase of our work in the Cooktown district.

Wed. Sept. 1:

Called up Burns Philp in Cairns and learned that the latest given date for our sailing from Sydney on the Pioneer Star is Oct. 15, and Dupain of B.P. advised that we allow ourselves 25 days in which to get our cargo from Cairns south to Sydney for shipment. Decided to ship by the Pioneer Line boat sailing after the "Star", if necessary", and carry on with field work until Sept. 28. The weekly boat from Cooktown to Cairns sails on the 29th.

Marie arrived on the ANA plane at 1 pm, carry a sugar bag of lettuce which had been presented to her at Mona Mona Mission the day before.

Stores (food) bought from Lewis' Store.

Wed. Sept. 2:

Traveled from Cooktown to Shipton's Flat on a 2½ ton Chev truck chartered from Norman Watkin of Helenvale. The first time on the expedition that we have had a truck big enough to carry our stuff comfortably and without high stacking.

Left Cooktown about 11 am (Marie with us), had an hour or more out for lunch at Kate Watkin's Lion's Den Hotel at Helenvale (21 miles) and got to Shipton's Flat (9 more miles) about 3:45. Road has been worked on in spots since I was here in February, and is reasonably good for a bush track in mountain country.

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We are very comfortably housed in three of the ranch buildings of the old sawmill. Marie and I have the former manager's cottage, the blackboys have the former laundry and bath house, while the rest of the party occupy the former batchelor's quarters. All good frame buildings, recently swept by Jack Roberts, the caretaker, and his blackboy Norgi. Altitude about 850 ft.

Thursday Sept. 3:
Guided by Norgi, George and I, accompanied by Willie and Roy, made a reconnaissance of Mt. Finnegan. Left camp at 9 oclock and returned, very hungry, at 3:45. Using information supplied by W/O Snow, who led a military survey party based at the Flat during the last war, we tried to follow the route used by that party. Norgi was out of the district during the war and did not know the route. He led us up an old pack horse track to the crest of an 1800 ft. grassy spur on the west side of the peak, and we followed this spur, with good traveling, to 2600 ft. where the savanna forest gave way to continuous rainforest on the last lift of the mountain. While I searched for water, for a camp at the beginning of the rainforest, George went on up another 500 ft. and found good running water. I first followed the line of a former box sluice built by tin miners. Soon found that no water useful to us would be got in that direction, so returned to the edge of the rain forest and went 300 ft. down the steep side of the spur to the south, where the survey men got water (apparently in the wet season). My search was unsuccessful. We will have to camp at the edge of the rainforest, which can be reached by packhorses, and carry water from the supply visited by George.

Among 16 plants collected were five orchids in flower. One of the orchids a fine white Dendrobium which I also collected on rocks near the summit of Mt. Tozer. Here on Finnegan it grows in hundreds on the rough bark of Casuarina trees and is now a beautiful sight.

~~Sat.~~
Sat. Spet. 4:
Collected on the creek (Parrot Ck.) which heads on Mt. Finnegan and flows through Shipton's Flat. Nothing startling in the way of plants, but Parrot Ck. is a beautiful rocky stream, falling rapidly over granite bars and shaded by an open growth of rainforest trees and the Eucalyptus-like Tristania? which has been a feature of all the ~~xxxx~~ rocky streams from the West Claudie south.

George and Van followed the old timber hauling track up to the big rainforest, about 1½ miles from camp, and reported very good rain forest, and trails still open after being abandoned for at least 4 years.

Monday, Sept. 6 - Ascent of Mt. Finnegan

10:00 Left Shipton's Flat - Delay fixing broken gear.

11:00 Top of main spur (1760') - Blue gum and oaks, kangaroo grass. Took photos in color and black and white.

12:30 Arrived edge rain forest and camped 50 yds. inside; 2530 ft. Altitude 7:30 P.M. 2600 ft.

Five of us in the party (Van, Don, Willie, Roy and LJB). Two packhorses hired from Jack Roberts of Shipton's Flat. Had only one pack saddle. Other gear packed on a riding saddle. Had about 290 lbs. on the two horses. Our bread supply, lamp and a few sundries carried in light back packs.

Roberts' horses were good; his gear old and rotten. A brown mare carrying the riding saddle load was inclined to be touchy. She hunched her back as she was being led away from camp, pulled away, and got rid of her pack. That happened twice before we got started, and her surcingle broke a third time before we got far. I led her after that and she soon steadied down and began to crop grass as we went along.

The brown gelding led by blackboy Norgi, in the lead, had the habit of bearing off to the right and hitting trees on that side. About 1000 ft. up the mountain, he barged into a tree and broke his surcingle.

Had fairly easy traveling most of the way. Followed the main timber haulage track uphill east from the sawmill for about 1/4 mile, and an ascent of 200 ft. or so. From there we followed a big branch 50 ft. and crossed Parrot Creek. From there we went more or less SE uphill for 300 yds., then turned right on a branch of the old timber road we had been following, and almost immediately dropped down into a strip of good rain forest in Bell's Gully. Here we left the old timber road on a sharp right turn into the rain forest (almost west) and crossing Bell's Gully (water in it) on a new-cut track, came to open forest again on a spur rising to the south. Followed an indistinct old pack trail up the spur to the 1800 ft. summit of the high west spur of Mt. Finnegan separating the waters of the Annan River and Parrot Creek. Turned east along the high spur ridge and followed it up to the edge of the rain forest at 2600 ft. Passed several old tin workings on crest of the ridge, the highest being at about 2400 ft. altitude.

Casuarina abundant in the savanna-forest from Parrot Creek upwards. Larger trees mostly bloodwood (lower levels), blue gum, and red stringy bark. Some big trees. A dense coating of knee-high kangaroo grass covers the ground. Grass trees with very short stem abundant in places.

Attractive country to climb through. The trees very photogenic. Splendid views of mountains west to the Main Divide, blue in the distance, the Big Tableland to the north; and through Stuckey's Gap south to Thornton Peak.

Sept. 6 (cont'd.)

Arrived at our camp site within the rain forest, Don, Van and I enlarged a little clear space where somebody (the wartime survey party?) had camped before, and rigged our 18 x 18 fly, while the boys took billycans and bags and went up the mountain about 1/3 of a mile for water. The boys had not been gone long when we heard one of them calling. Sent old Norgi after them with two guns. Boy and Willie had found two climbing kangaroos in a tree top. One, an adult female was shot; the first tree climbing kangaroo for the collection. The other was hit but got away.

Hunting the tree climbers delayed lunch and it was after 3 o'clock when I set out up the mountain to collect. Got as far as the water place - a tremendously steep, rocky streambed falling to the Annan, about 350 ft. in altitude above camp and distant about 600 yds. A most beautiful place, roofed over by great trees and open underneath. Rocks covered with mosses and liverworts, and a scattering of ferns and Helmholtzia, A small Marattia or Angiopteris, 1½ to 3 ft. high, looks most interesting.

Returned to camp about 6 o'clock with perhaps 20 spp. of plants. Don had shot 6 birds. Van and Roy had out 65 traps between them.

Tuesday, Sept. 7

7:30 Left camp for top of mountain.

8:15 2 big granite rocks on crest of spur - 2930 ft. (Did some track improvement. Began new track up spur crest to avoid steep ravine of water place.

8:40 Gully of water place (tin miners' intake lower down) 3100 ft. At this point gully turns sharply east and up, where dry open (dead trees) branch gully enters from left.

8:50 On up gully.

9:20 Left gully ca. 3200 ft. and struck up for open place on right. Big open area flat rock and boulders. Shrubs and orchids. Magnificent view to Thornton Peak, blue Pacific and west to Main Range.

11:50 3400 ft. Survey party camp on a headwater stream of Parrot Creek. Good water, and camp site, with ample space on a flat on north side of creek.

12:45 Summit - 3660 ft. Clouds blowing over. Visibility 50%.

2:00 Left summit. Alt. 3680 ft. Photos: Willie and cairn; 1 view to west.

3:00 Survey camp. Had lunch here. Improved road. Unable to follow survey trail most of way going up. Alt. 3500 ft.

3:30 Continued down. Alt. 3400 ft.

4:30 Left survey trail on Parrot Ck. waters and followed our new trail of this A.M.

Sept. 6 (cont'd.)

Arrived at our camp site within the rain forest. Don, Ken and I emerged a little after noon hours to study (the working survey party?) but camped before, and pigeon our 18 x 18 fly. While the boys took billycans and axes and went up the mountain about 1/2 of a mile for water. The boys had not been gone long when we heard one of them yelling. Went in there after them with two guns. Roy and Willie had found two climbing kangaroo in a tree top. Don, an adult female was shot, the other two climbing kangaroo for the collection. The other was not but got away.

Skinning the two climbers delayed lunch and it was after 3 o'clock when I set out up the mountain to collect. Got as far as the water place - a tremendously steep, rocky stream bed falling to the Amazon, about 1000 ft. [illegible] move [illegible] about [illegible]. [illegible] most beautiful place, fronted over by great trees and open underbrush. Rocks covered with moss and liverwort, and a scattering of ferns and helmontia. A small Aeschynanthus or Lysionotus. It is 3 ft. high, looks most interesting.

Returned to camp about 6 o'clock with perhaps 20 kgs. of plants. Ken had shot 6 birds. Ken and Roy had out 65 traps between them.

Tuesday, Sept. 7

7:30 Left camp for top of mountain.

8:15 2 big granite rocks on crest of spur - 2930 ft. [illegible] trees improvement. Began new trace up spur crest to avoid steep ravine or water place.

8:40 Gully of water place (tin miners' tracks lower down) 3100 ft. At this point gully turns sharply east and up, where dry open (dead trees) branch gully enters from left.

9:00 On up gully.

9:40 Left gully ca. 3300 ft. and struck up for open place on right. Big open area flat rock and boulders. Shrubs and orchids. Magnificent view to Emerson range, also Willie and west to main range.

11:30 3400 ft. Survey party camp on a headwater stream of Barrot Creek. Good water, and camp site. 16th empty [illegible] on a flat on north side of creek.

12:45 Summit - 3600 ft. Clouds blowing over. Visibility poor.

2:00 Left summit. Alt. 3000 ft. Lunch. Willie and I [illegible] view to west.

3:00 Survey camp. [illegible] trees. Improving road. Unable to follow survey trail most of way going up. Alt. 3300 ft.

3:20 Continued down. Alt. 3400 ft.

4:30 Left survey trail on [illegible] Ck. Waters and followed our [illegible] of this A.M.

4:45 Summit of dividing ridge. 5 shot pams, color and black and white, from west to Big Tableland and Mt. Amos. Alt. 3500 ft.

5:45 Junction of my new trail with trail to camp water place.

6:05 Back in camp. In another 15 minutes the light would have been too dim in the rain forest for us to see the trail. Was glad to see blackboy Roy attending to a big billycan of stew hung over the fire.

Phenomenal results from traps last night. Van and Roy, in 45 traps set in rain forest, caught 26 mammals - 3 Melomys, the rest Rattus. Nothing in 20 traps set in savanna forest. Don, for 24 traps, got 8 Rattus. Jacking last night, Van shot a spiny anteater. Today Van went with me to the 5200 (actually over 5300 ft.) level and set 25 traps in the shrubberies and low scrubby high mountain forest.

Today Don shot some half a dozen birds. Van and Don will work late by lamplight tonight.

Wednesday, Sept. 8

9:45 Left mountain camp for return to Shipton's Flat.

Kodachromes:

White Dendrobium - 2600 ft.
View to North through trees - 2500 ft.
Shipton's Flat and Kings Plain from Lookout rock, ca. 2100 ft.
Ecotone rain forest and savanna forest from same lookout.
Savanna forest of stringy bark, bloodwood, oak, grass tree and kangaroo grass - 1850 ft.
Parrot Ck. at crossing - 1060 ft.

11:45 Back at Shipton's Flat.

Before leaving the mountain camp I went up the trail to the 2850 ft. level to collect Agapetes moorehousiana, there a large liana dropping its tubular red flowers on the leafy floor of the rain forest. It is the only member of the blueberry family known from Australia. Yesterday I collected sterile specimens of it on the summit of Mt. Finnegan, where it is a low shrub, and Van brought down one flowering sprig from the shrubberies at 3300 ft.

We traveled slowly on the way down today. Casuarina duff made footing slippery on the steeper slopes. I carried a 25 lb. pack of specimens; Willie had up nearly 40 lbs.

On my climb to the top of the mountain on the 7th, it became clear that the wartime survey party had gone another way, and climbed the peak by a more direct and much steeper route. Our route and theirs correspon ded only at the beginning and the end. We got off the route described by Snow at the first fork of the old timber hauling road 200 ft. above Shipton's Flat on our first reconnaissance of the mountain, and I did not strike it again until I got to 3400 ft. on the 8th. The route described by Snow is similar to the one followed by us in regard to county and general direction. Snow mentioned 2 big high granite rocks as marking the place on a ridge crest where they found the going too hard thru undergrowth and struck down to the right to a gully carrying permanent water. There are two big rocks on the crest of the ridge from which

we opened a track to the water place above our 2600 ft. camp. It was this coincidence of rocks which made me think that after entering the rainforest at 2600 ft. on our first reconnaissance of the mountain we were following the survey party's trail. In reality, we were following old blazes and cut stubs left by tin miners 20 to 30 years ago. The miners went high on the mountain to draw water with which to work their claims. The intake for their water supply was on a long flat stretch of the stream from which we got our camp water, and about 50-100 ft. in altitude above our water-dipping place. Cutting track toward the top of the mountain, I more or less followed the line of their race, marked by piles of stones on which they rested their wooden flume. The miners operated here so long ago that not a trace of their flume remains, apart from the piles of stones. The woodwork has rotted away and disappeared completely. Above the flat stretch in the stream I found only an occasional cut stub marking a former trail. This did not help, for I already knew that the tin miners had been over the mountain slopes so thoroughly that one can find cut stubs on almost any line of travel.

The trail of the survey party, where I struck it high on the mountain, was markedby blazes and stubs ovriously more recent than those I had seen before. I should have been able to judge the age of cuts and blazes better than that.

My trip up the mountain gave me 117 numbers of plants, including a sizeable collection of mosses. Collected everything I saw while hunting trail and cutting a way through, except a fine big Dicksonia which grew in abundance between the survey party's camp and the summit of the mountain. Of the four spp. of treeferns seen on the mountain, the Dicksonia is outstanding for size. Not more than 12-15 ft. tall, but thick of stem, the leaves covered with red hairs, and the stem enlarged at the base with a mass of adventitious roots as much as 3 ft. in diameter. On the way to the summit, and having difficulty in following the trail of the survey party, I reckoned I would collect the Dicksonia on the way down. On the descent, feeling not my best after 7½ hours hard work without food, I could not find a plant with a fertile leaf. I hope to revisit the mountain before we leave Shipton's Flat. There must be many plants I did not see in the short time I had for straight collecting. The great majority of plants seen had no flowers or fruit. But in the high mountain forest and scrub many spp. were putting out new growth, and in another couple of weeks I might find some of these spp. in flower.

Thursday Sept. 9: In camp, preparing collections from Mt. Finnegan. On the 7th, while I was on the mountain, George established a mammal collecting camp in the big rainforest of the Tabletop, at an altitude of about 1150 ft. and distant about 1½ miles east of Shipton's Flat.

Friday Sept. 10: Finished work on my Mt. Finnegan materials in the morning and after lunch collected on Parrot Ck. near camp. No plants worth special mention. Van and Don returned from the mountain camp early yesterday afternoon, looking unwashed and tired. But they had a very good mammal in the bag.

The morning I left the mountain camp Don accompanied Van to his trap line at the 3300 ft. level. Don was "Squeaking-up" birds when a beast that looked like a big rat stuck its head out of the mossy low scrub. Shot by Don, it turned out to be the rare, primitive musk

[illegible]

kangaroo, Hypsiprymnodon. Don very generously donated the specimen to the Archbold collection. It is the only specimen of its kind we have since George shot one near Julatten, while we were strikebound in Cairns at the beginning of the trip.

Sat. Sept. 11: Went to Tabletop to visit George's camp and collect in the big rainforest. Van and Don, with Robert's two packhorses, followed later in the morning to camp and collect there for a few days.

Found George camped on the gravelly low floodbank of a creek just within the edge of the rainforest. Rainforest of the vicinity thin, dry and poorly developed, but old timber trails give ready access to forest which George says is better. My morning yielded only 15 spp., which is poor collecting for a new rainforest locality.

The fine, clear weather we have enjoyed since our arrival at Shipton's Flat ended last night. This morning overcast and threatening rain, and the mountain top under cloud most of the day.

Sunday Sept. 12. Collecting up Parrot Ck. from camp, we passed through a gorge outthrough the granite and offering little foothold or handhold in the worst spots. Got a fair number of not very exciting plants.

Geoff walks up to the camp in the big rainforest after breakfast, collects there all day, does a bit of light-trapping after dinner, and returns to base about 8:30 in the evening, hunting spiders on the way down.

Monday Sept. 13. The morning spent in the big rainforest of the Tabletop. Followed the main timber haulage trail of former years, which enters the rainforest to the north of George's camp and is said to lead through it to the tin-mining settlement of Rossville. Followed the trail to an altitude of about 1200 ft, through forest improving with altitude. Collected 20 spp., which is more than I can handle in my drying equipment. Some of the rainforest plants are bulky and sappy, and others have fleshy and sugary fruits which dry slowly.

According to Jack Roberts, who cut timber before the mill at Shiptons Flat closed down in 1945, the timbers cut were kauri pine, hickory, flindersia, and maple. About 1 million super feet of red cedar was taken out in one year. The minimum girth for cutting allowed by the Forestry Dept. (this is a forest reserve) was 6 ft. at the stump. In Cooktown I was informed by Shire Clerk Landy that minimum cutting girth was 7 ft. Landy said the company is dickering with the Forestry Dept. for a reduction of 1 ft. in cutting girth and a reduction in royalties payable to the Crown before it will shift the Shipton's Flat mill to Cooktown. The mill closed down in 1945 because, it is said by various people, men could not be got to work at this remote spot. The company now proposes to haul timber in the log to Cooktown where employees and their wives can enjoy the amenities of a community to which beer and picture shows are available.

Tuesday Sept. 14: An unprofitable day. On my morning's field I first examined a gully strip of rainforest across Parrot Ck. from camp. Dry tall forest, abounding in bally gum, and offering nothing to me at this time of year. Then followed Parrot Ck. down about 3/4 mile to a log bridge crossing of the creek on the old timber hauling road to Cooktown. A pretty stream, bordered with tall gum-barked Tristania and a Xanthostemon just finishing a sporadic burst of flowering.

For the first time on the trip I found Dischidia in flower. At least three spp. occur on the Peninsula. D. Rafflesiana grows on the rocks of Parrot Ck gorge, and here, as farther north to the Tip, it has not been found fertile. Today's sp. has grey-mealy leaves and I have not noticed it farther north. A common sp. in northern parts has brownish leaves longitudinally furrowed.

Wed. Sept. 15: Made a long - 7:30 to 2:30 trip into the big rainforests of Tabletop. Reached a point along the main timber trail about 2½ to 3 miles from camp and over 1700 ft. above sea level. Had some good collecting and brought back 24 numbers of plants.

Good, well developed rainforest is found in spots; the best forest being on creek flats at the lower levels, and on the upper slopes in general. It would seem that, climatically, the area is not wet enough for good rain forest. The lower slopes, apart from creek flats, are definitely dry at the present time, and presumably are like that every dry season (there has been a shower or two on only two days since we arrived at Shipton's Flat on Sept. 2nd.). Above about 1500 ft. conditions are moister. Probably more showers fall there in the dry season, or clouds, piled up by the prevailing southeast trade wind, settle on the heights.

In their mixed composition, the rainforests are typical of their kind. The outstanding tree, and to me the most easily recognizable, is the kauri pine. Its smooth, blotched and shallowly pitted grey trunk is like no other in the forest. Kauri is also the biggest tree. It has been too thoroughly exploited for really large trees to be seen near the timber trails. Not many trees would measure above the 6 or 7 ft. minimum cutting limit. Jack Roberts tells of one big kauri, growing on rough rocky ground, which has a diameter of 9 feet.

The collecting camp in the edge of the big scrub was closed today and the gear transported down to Shipton's Flat on Robert's pack horses. George and Van are preparing to leave to establish another short time collecting camp on the Annan River, near Helen vale. From there they will go on to the Black Mountain, Green Hills, and finally the rocky hills about 30 miles up the railroad from Cooktown. Am giving George his head for the last two weeks of the trip, and letting him go on a sampling binge, such as he has wanted to do all through the piece.

Thursday Sept. 16: My morning spent in the preparation of yesterdays plants. In the afternoon, collected up the gully behind camp, and got little for my efforts. As in all gallery woods in the area, bally gum (Blepharocarya) is the principal tree and is now in the height of its production of small brown flowers which sprinkle the ground and powder the leaves of the undergrowth plants.

George and Van departed for their camp on the Annan, and have rigged their outfit on the river about ½ mile above the Helenvale hotel. Jack Roberts did their transport in two trips with his ½-ton ford pickup.

Friday Sept. 17: Another long day of collecting in the big scrub. Took lunch and returned to camp at 5:15 w th 36 numbers of plants. Followed the righthand branch of the main timber trail to George's former camp site and on up the slopes to 1500 ft. This southern part

of the big rainforest of the Tabletop is much drier than the northern part. Apparently it lies in a cloud shadow behind Mt. Finnegan. The old timber trail passes through a savanna-forest pocket about quarter of a mile in, and ends in poor broken-canopied forest at 1500 ft.

Returning to near the savanna-forest pocket from the 1500 ft. level I followed a big branch of the trail trending north to NE through better rainforest, and after a few hundred yards struck through a trackless area of tall forest to a small waterfall on Parrot Creek. Lunched there, and afterwards followed the creek down to near the west edge of the rainforest. The creek runs strongly in its bouldery bed of granite, but the mosses on the rocks are dry and shrivelled with the dry weather. In a climate with a more evenly distributed rainfall a habitat like Parrot Creek would carry many more species of ferns and mosses than I have been able to find.

Temperatures are increasing, and in spite of the dry weather, trees of the rainforest are coming into flower. In another month collecting should be good in this locality. As it is, I am doing better here than in any other rainforest on the Peninsula.

Sat. Sept. 18: The whole day spent in preparing yesterday's plants. The smoke of bushfires has cleared away and the mountains stand out clear and close. This morning the thermometer dropped to 12 C; yesterday's maximum was 32 C. Hardly a cloud in the sky for the past several days. Glorious weather if one can go into the rainforests to avoid the midday heat of the open country.

of the big reinforest of the Iboroto is much drier than the northern part. Apparently it rains in a close annual period w/. Planegin. The old timber trees, besides though a rainforest forest about quarter of acre in, are made in poor broken-canopied forest as 12.0 ft.

Returning to near the savanna-forest pocket from the Iboro ft. love a follower early, crossed of the trail trending north to MT through better reinforest, and after a few hundred yards across through a transition area of tall forest to a small waterfall on River Yonder there, and afterwards followed the creek down to near the west edge of the reinforest. The creek runs strongly in its boulder bed of rounds, but the banks on the rocks are dry and exposed also in dry weather. In a climate with a more evenly distributed rainfall a habitat like reinforest creek would carry many more species of forms and mosses than I have been able to find.

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Oct. Sept. 18: Two hours dry spent a morning yesterday plants. The zones of burnfires ran clearly away and the mountains stand out clear and close. Late evening the thermometer dropped to 12 C. yesterday maximum was 22 C. Hardly a cloud in the sky for last several days. Wondrous weather if one can go into the reinforest to avoid the sticky heat of the open country.

Sunday Sept. 19: Back into the northern part of the big rainforest. Followed the main, or left hand, branch of the old timber haulage trail to where it forks near an old camp site marked by a big mango tree surrounded by second growth forest. From there followed the left hand branch up a good steep rise and crossed the Rossville water race at 1500 ft. Through forest improving generally with altitude, in regard to floristics, we followed the old timber to its end in the rain forest at 1800 ft. Was under the impression that a horse track, continuing from the end of the timber road, went on to the tin mining settlement of Rossville. Found on inquiry from Jack Roberts that the bridle path leads off inconspicuously somewhere between the water race and the termination of the timber road.

An English company, mining for tin at Rossville, built the water race many years (ca. 30 years according to Roberts) ago to carry water from near the head of Parrot Creek. In one place the race is carried thru a tunnel. Disputes arose with Shipton, of Shipton's Flat, over water rights, and Shipton, having his ground on Parrot Creek, won the legal decision.

Monday Sept. 20: Preparing yesterday's specimens and packing dried materials.

Tuesday Sept. 21: Marie left for Cooktown in Jack Robert's old Ford enroute to Cairns. She has accompanied me on all my field work here, apart from work on the mountain, and has spotted plants in the forests which I passed by and even Willie's sharp eyes missed.

Hoping to find plants which we missed while track finding and blazing trail on Mt. Finnegan two weeks ago, Willie and I made another visit to the mountain today. Left Shipton's Flat at 6.45 and got back, with a nice lot of specimens, at 6 PM. Traveled steadily, with a few brief rest stops, until we reached the edge of the rainforest and the site of our former sub camp. Got there in two hours; then started to begin to collect.

Some distance up the water-supply creek of our former camp I noticed open sky to the left. Investigating, I climbed a few feet to the crest of a ridge to find a sudden change in the vegetation from wet rainforest to stunted high mountain forest surrounding a rocky glade. From the glade the ground receded in a moderate slope, then, within 50 yards, the mountain seemed to drop away into empty space. I was standing above the sheer bare cliffs which can be seen from a distance on the west side of the mountain. Lichenous granite rocks, surmounted by shrubs or masses of orchids, stood in the glade. The open ground was occupied by a dense cover of Dianella (an uncollected species) in early bud, and the same epiphyte-gone-to-the-ground orchid which grew on the rocks. Dead and dying trees on the edges of the glade were cluttered with tufts of a small, white, very fragrant orchid, growing amongst mosses and hepatics. And in one corner I came across a single red flower of Rhododendron Lochae, Rhododendron is abundant in such habitats on the mountain, but this was the only plant of it that I found in flower.

At 12:30 we reached the open rocky area at 3350-3400 ft. on the southwest side of the mountain. Smoke haze from distant, and not so

distant bushfires made conditions not too good for photographing the vast expanse of mountains seen to the west and south from this vantage point. The very summit of Thornton Peak was hidden in white fleecy clouds, and the sharp spire of rock surmounting Mt. Peter Botte poked out only now and then. Clouds were drifting toward Finnegan, so I had Willie boil the billy with water carried up from the stream, while I set about making pictures. Thousands of white rock orchids (Dendrobium) had opened their flowers since I was on the mountain two weeks before. These and the drying red leaves of a curious cushion plant made good subjects for color photos

Finding the open rocky area too dry for spring herbs, if any occur there, I botanized in the stunted high mountain forest up to an altitude of 3500 ft. Results not very rich, but I found a solitary tree of Balanops bearing an abundance of orange-yellow fruits.

Started back down the mountain at 3 oclock; botanized to the edge of the rainforest at 2600 ft; shot 3 birds for Don, and got back to camp at 6 oclock. I carried Don's .410 gun in the hope that I might come across another Hypsoprymnodon at the higher levels.

Roberts, returning from Cooktown, brought news that the "Wandana", enroute Thursday Island on her monthly trip, is due to sail from Cooktown on the 24th. Therefore decided to close camp here on the morning of the 23rd, move into Cooktown, and get our abo employees away on the boat. Not expecting the Wandana at such a convenient time, we had booked air passages for the boys before leaving Cooktown.

Wed. Sept. 22: Preparing and drying the 34 numbers of plants gathered on the mountain yesterday.

Thursday Sept. 23: By prior arrangement, Norman Watkin, returning from a trip to Mt. Poverty with 14 drums of kerosene, called in about 9 AM and we set out for Booktown. Stopped at the Lion's Den at Helenvale for morning tea, and to say goodbye to Mrs. Watkin, and were in Cooktown in time for a 1 oclock lunch.

Stopped in the gap through Black Mountain to make photos of this remarkable jumble of black-coated granite boulders.

Sat. Sept. 25: The Wandana, due to sail from here yesterday, tied up to the wharf about midday today, and it is reported that she will not leave until noon tomorrow. So goes shipping on this abandoned coast. I have an air booking for Cairns for Monday's plane. Scheduled time of departure is 10 AM. Have just been informed that the plane will leave at 7 AM instead. In this way, to suit the current convenience of the one air company, are plane services run north of Cairns.

Yesterday afternoon, George and Van returned from Elderbury, some miles up the railway, where they had spent a day and a night for the main purpose of hunting rock wallabies in a gorge in the sedimentary rocks of that area. Saw no rock wallabies, but jacked two Petaurus, and shot several small bats in ra lway culvert on the return journey. Came in with a work gang coming home to Cooktown for the weekend.

This morning George and Van left to spend the weekend at Seagreen's farm, about 14 miles out of town on the Endeavour River. This time their main objective is the whiptail wallaby.

Cooktown is celebrating the Kennedy Centenary today. A sports meeting in the main street, and the unveiling of a monument to Kennedy and his party. In 1848, Kennedy, leading a party of 13 men, made the first land exploration of the Cape York Peninsula, Kennedy was speared by the blacks, and all but two of his followers perished. Dan O'Brien, secretary of the Royal Geographical Society of Queensland, was here for the occasion. Mrs. Boyd, 83-year old pioneer of the Peninsula (went to Merluna with her husband in 1888) did the unveiling. Hodges, chairman of the Cook Shire Council, was leader of the piece. I was roped in to take a seat of honor and make a speech.

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Cooktown is celebrating the Kennedy Centenary today. A sports meeting in the main street, and the unveiling of a monument to Kennedy and his party. In 1848, Kennedy, leading a party of 13 men, made the first land exploration of the Cape York Peninsula. Kennedy was speared by the blacks, and all but two of his followers perished. Dan O'Brien, secretary of the Royal Geographical Soc. of Queensland, was here for the occasion. Mrs. Boyd , 83-year old pioneer of the Peninsula (~~mmxxm~~ went to Merluna with her husband in 1888) did the unveiling. Hodges, chairman of the Cook Shire Council, was leader of the piece. I was roped in to take a seat of honor and make a speech.

Sunday Sept.26: It was about 4 PM, and subsequent to several false rumors of her starting time, that the Wandana sailed for Portland Roads and Thursday Island. Aboard were our three blackboys and Joe the cook. I was not at the wharf to see them off. There had been too many tearful farewells from Joe in the bars of the town for me to feel like facing another. Today, however, Joe was in reasonably good shape; shaved, bathed, and dressed in good new brown shoes, gaberdine pants, white shirt and panama hat. He even appeared for lunch on the ship, I'm told. Like most hard-drinking men, Joe eats nothing when really on the booze.

Joe has plans to go prospecting in the remote and little known Escape River country. With him, if things work out, will be a white partner (Dard McDowall, I believe) and a blackboy. Gold seems to be the main attraction. There are vague stories of gold in that area, although by whom found I can not learn. Jack Gordon has no doubt been through the Escape River country on one or other of his long trips into the bush. Just before World War II, or it may have been World War I, two prospectors were lost in the general area which includes the heads of the Escape and Jardine Rivers. Dick Holland was one who searched for them. The bones of one ~~mmxxfound~~ of the lost men were found. Nothing has been seen or heard of his mate. At the outset of their trip they landed on the coast from a boat, and they travelled on foot. A present day attraction in the Escape River country, and one which is not spoken of out loud, is the reported presence there of wrecked American aircraft which came down during the war and might contain some good loot. Adventurers up Thursday Island way talk of making an effort to find these aircraft, but I doubt if anyone has actually made an attempt. It was whispered to me that if I took our expedition into the Escape country we might find something "worth while." Dolf Perkins, a very good bushman and prospector of Portland Roads, is building a boat with the expressed intention of taking a crack at the Escape River country.

Joe will have some of our discarded camp gear in his outfit. A tent of U.S. Army green duck, the lamp he used, some cooking utensils, etc. He bought a stock of groceries in Cooktown. And amongst his stores were 6 bottlesof OP rum which he swore he would land intact for the entertainment of the friends who were sure to be gathered on the wharf to meet the Wandana at Portland Roads. Toward the end of his job with us, Joe saved pumpkin, papaya, granadilla and citrus seeds to plant at his camps in the bush. I wish him luck. He did a good job for us, except when the booze had hold of him, and that was whenever he could get enough to drink.

I rather think that but for the nightly rum ration Joe would never have stuck out the trip with us. That evening spot, and Joe always made it a good one, seemed to hold him together. Dinner over, Geoff would take charge of "the baby" and carry it to his tent for safety. The bottle was not locked away as a rule, and if the routine was forgotten, Joe seldom took advantage of the lapse. It seemed to be a point of honor with him not to swipe liquor. I remember only one or two occasions when the temptation was too much for him.

Joe was not so finicky about helping himself to our preserving ~~alcohol~~ spirits. We carried ten gallons of 95% grain alcohol in a screw-topped can in a locked case. George Tate, who used the stuff most, had it in his charge, and the case usually was locked - at the start of the trip. Later on, for we used the alcohol for pre-heating our lamps, the case was often left open. That slackness ended at Iron Range, when George discovered the spirits were disappearing pretty fast, and for several days the cook showed signs of drink. When we got to Cooktown the 2 or 3 gallons of alcohol remaining were poured off into a 5-gallon kerosene drum and the locked can filled with Geoff's snakes and lizards. There was no way of securing the 5-gallon drum, and, at Shipton's Flat, Joe got at it. The first I knew about it was when George came up to our cottage, where I was working on plants one afternoon, to say he had seen Joe at the spirits can with a pint pannican in hand, and that he was then stretched out on his bed, obviously drunk. Then Geoff came with a sample from the can. It was the reddishbbrown color of weak tea and had a pungent and aromatic smell. Joe, with only about ten days to go to finish the trip, had broken down and lost all control of himself. Losing all caution, he had doctored the alcohol to make it more palatable, using Kiwi boot polish, I suspected from the smell of the stuff. I suppose I should have fired the poor devil, pronto, as urged by sundry advisors, but Joe would have been the least inconvenienced by that, and besides, we had come a long way, and Joe had confounded all the wise prophets of the Peninsula by sticking it out as long as he had.

Our three blackboys departed with various presents and without any show of emotion. Each had his camp cot and swag cover as parting gifts, and a share in hurricane lamps, pots and pans and cutting tools. They had handouts of used clothing, too, and to Willie I gave the tent they had slept in. All had gifts of surplus plug tobacco. I doubt if much of their accumulation of pocket money allowance and Sunday pay was left when the Wandana sailed. They enjoyed the kudos they got through having been with us. They were proud of their exploits, and glad to be going home. As Willie said, they would have "big stories" to tell. The stories started on the Wandana, where tourists, fresh from southern cities, showed great interest in the boys.

Geoff attended to last farewells on the Wandana. I visited my German missionary friend, Mr. Swarz, and from there followed a car road to the untended lighthouse World War II defense works on Grassy Hill. Grassy Hill is the high point of land between the harbor and the sea. Captain Cook, when his ship was being repaired in the harbor, climbed the hill daily with his telescope, trying to spy out a passage through the coral. I was on top of the hill, making color photos, when the Wandana came out of the little harbor and headed for a passage which perhaps Cook had found. Besides the coral, out to sea, the Cooktown harbor has an entrance bar of silt brought down by the Endeavour River. The bar is not dredged in these days of Cooktown's decay, and even a small vessel like the Wandana must cross it on the tide.

Monday Sept. 27: Cooktown has two airports, and two planes a week on local service. QANTAS planes, too, call on their way to New Guinea. On local service, a DC3 calls Wednesdays and Thursdays, on its way to, and back from, Thursday Island. Monday's plane comes from Cairns, and returns there as soon as it can be unloaded and reloaded at the small airport a mile or two up the Endeavour River from town. The Douglas uses the big ex-military field nine miles up the river, or rather, nine miles out of town. Monday's plane is a little De Haviland biplane, carrying six or seven passengers, depending on the size of the passengers and the weight of baggage they have. The local agent is not fussy about a few pounds overweight in baggage. The air trip to Cairns costs 38/6, as against 40/- on the launch "Merinda" which makes the trip between the two ports once a week, and takes a good 12 hours to do it.

Other passengers this morning included Mrs. Sheppheard of Musgrave, who was badly air sick; Dan O'Brien, wearing a clean celluloid collar - for once; and a Roman Catholic priest who chattered nervously before we took off, and mouthed rapidly over a sacred book most of the time we were in the air. Another passenger was a young chap we had met at Thursday Island. Don Vernon was travelling with me as far as Cairns, on his way through to Brisbane, and home. The seventh passenger, who was to have ridden in from the Starcke River, away north of Cooktown, did not turn up. He could have no way of knowing we were taking off hours ahead of schedule, and the agent surmised that after his long ride he would have to wait a week for another seat on a plane. Our priest would perhaps have been even more jittery had he known that the most important part, and half the weight in Don's canvas bag was a live carpet snake, being carried against all air-safety regulations, after the agent's refusal to accept it as freight. Don carried only his shaving kit and notebooks as personal gear. Space left by the snake was filled with a homecoming contribution of soap. By some freak of controlled distribution, soap is scarce in Brisbane and plentiful in the far north. Mindful of earlier experience I too was carrying supplies south to the source of all supplies. Mine was tobacco.

Our flight was too early in the morning - a dull morning - for good views of the mountains, but I shot some photos of Mt.Finnegan as we passed it on the seaward side. Finnegan is by far the most massive and conspicuous peak north of the Bloomfield River. The northern termination of the big, continuous rainforests is on Mt. Amos and the Big Tableland. These elevations are the last of any consequence on the coastal range of mountains.

We were in Cairns, and sitting down to breakfast at Hides' Hotel before 9 oclock. Don's plane for Brisbane left about 1.30. Hides' seemed palatial after the shacks and rickety old structures which serve for hotels on the Peninsula, and I was unsure of my footing on the polished tile floors. Ern Stephens came in to meet Don and lunch with us. During the morning I checked on shipping and found that the "Pioneer Star" is now supposed to sail from Brisbane on Oct. 17. Also discovered that the small vessel "Lady Jocelyn," owned by John Burke Ltd., is expected to arrive in Cairns from the Annie River toward the end of the week. Our Coen collections should be on the Lady Jocelyn. Mack of the Queensland Museum has been making a fuss about the non-arrival of Don's Coen collections and has put the matter of their shipment - or delay in Coen - into the hands of the police at Coen.

Here at Hides', "Gentlemen are requested to wear coats for all meals, ties for dinner." I did not carry a coat on the Peninsula. Left all but field clothing with the manager of the hotel when we went bush. Today, when I opened my bags, I could find no coat. The manager, Geoff Henderson, is away on business in Townsville. The staff very upset, when a search everywhere, including Henderson's and Mrs. Henderson's closets, revealed no belongings of mine. I appear at meals respectable clad in one of Henderson's rather narrow shouldered coats.

Tuesday Sept. 28: I had two reasons for arriving in Cairns ahead of the rest of the party. One object was to see about official clearances of our collections for export, the other to make arrangements for shipping the collections to Brisbane and begin work on the packing and crating of my plants so that I can leave as early as possible for Brisbane, where official calls have to be made in connection with winding up the expedition. Time is short for all that has to be done.

Have booked space for our cargo on the "Wandana," which is due to arrive in Brisbane, on the completion of her final voyage on this coast, on the 11th October. Have two berths, for Geoff and Van, on the Wandana, and, to be on the safe side in the event of the Wandana being delayed on the coast, I have applied for train booking south for Geoff and Van. The winter tourist season is about over, but a post-war shortage of transport still prevails and bookings have to be made well in advance. Heve air booking for Marie and self for Sunday.

Clearance of the collections for export to the U.S. involves permits from both State and Federal governments. To Ern Stephens, who administers the State protection acts, I have applied for a permit to export"Fauna and skins," a permit to export "Flora," and a quarantine clearance on the skins and pickled specimens, and he has wired Brisbane for instructions. The local Sub-collector of Customs says that, as the actual port of shipment for our cargo for overseas will be Brisbane, he can not grant an "export entry", but both he and Stephens have waived the right to inspect the collections before they are packed. I anticipate no hitch in getting State permits to export (that was fixed by Arthur Bell, Under Secretary, Dept. Agriculture & Stock, before I came north in January), but I am not so sure of the Federal authorities. Thoughton has influence in Canberra. I know that in the beginning he tried to have shackles put on our expedition, and I would not put it past him to try to get his hands on a share of the mammal collection for his museum.

Cairns is experiencing an abnormally dry season. The season is unusually dry everywhere from Coen south to about Rockhampton. The wet season rains have been far below average for the past three years and this cumulative shortage is having serious effects. A very large area of the central-west and north-west of Queensland is actually drought-stricken, and sheep and cattle are being lost through shortage of water and feed. At Cairns, as at Cooktown, the air is thick with smoke haze , and jagged lines of grass fires light the sides of the mountains at night. There will be more fire-killed rainforest on the slopes after this season, and further inroads on rainforest land by grass. The fires, starting from the cane fields and edges of settlement near the coast, ascend the spur ridges, which are drier than the gullies in between the ridges. Thus it is that the mountain slopes facing the coast present pattern of alternating grassy spurs and rainforested gullies and streamways. Much rainforest on the slopes was destroyed by fire during the dry season of 1947. The dead trees are still standing. The fire-killed areas will be invaded by lantana (L.camara). This rampant, scrambling shrub will form dense thickets, and cover the ground inches deep in dropped leaves. Lantana is a great builder of humus and enricher of soil. It is also a bad fire hazard in dry seasons. Given normal seasons, in a climate like this, it might be expected to set up conditions favorable for forest regeneration. No doubt it does fill this role in situations protected from fire, in places where it can grow undisturbed, such as in hollows and on the banks of streams, where soil moisture is always sufficient to maintain it in vigorous growth, and in waste corners and along roadways in cultivated areas, where no one bothers to light fires and fires can not enter from the outside. But on the spurs of the mountain sides, where slope, shallower and often stoney soils, and exposure to wind are combining factors in producing conditions less favorable for plant growth and more favorable for the sweep of fires,

lantana is anything but a benign weed. It will carry fire. Fire can creep over the undecayed leaf litter which always lies on the ground under lantana. Spells of dry weather increase a fall of leaves which is copious at all times. Growth is so rampant and profuse in good times that leafy new branches shade out and kill the old. Falling leaves become caught up by tangles of dead and living branches and form nests and often large masses of inflammable material above the level of the ground. A fire in the lantana will scorch and kill neighboring rain forest. And so the destruction progresses.

Cairns is in a climatic tension zone where rain forest and savanna forest compete for occupation of the land. It is a contest between grasses and woody plants, the grasses and grassland trees of the svaanna forest tending to occupy the drier and less fertile soils. Enough of the original vegetation remains to indicate that, before disturbance by the white man, who has been mainly concerned in clearing land that can be plowed to grow sugarcane, rain forest occupied most of the area. Considerable extents of sandy, acid soil on the lowlands were covered with Melaleuca-Acacia savanna forest, while some of the drier foothill ridges carried Eucalyptus savanna forest. The fringes of streams, the extensive rich alluvial flats, at least some of the smooth loamy ridge lands of the coastal plain, and the greater part of the mountain slopes, supported rainforest. Only relic scraps of rainforest remain on cultivable land, and it would appear that a good deal of sugar cane is grown on land which formerly carried savanna forest. Rain forest is receding on the non-arable mountain slopes, as a result of fire, and as the forests recede, the grasses gain ground. Occupation of burned forest land by lantana is only a temporary phase and it does not always follow the burning of forest. Grasses, mainly perennial, rhizomatous blady-grass (Imperata arundinacea), dispersed by wind-blown seed, may be the first colonizers of the burned forest ground, and once established, the grasses will retain control as long as fires occur often enough to keep forest regenerative growths in check. While under present conditions rainforest is losing ground on the mountain slopes, and being replaced by grasses which set up conditions favorable for the establishment and growth of savanna forest trees, the situation is reversed on tracts of infertile sandy soil on the lowlands. There may be seen savanna forests in which, due to exclusion of the fairly frequent fires which seem necessary for the maintenance of savanna forest of any type on any sort of soil in this climate, rainforest pioneer trees and shrubs are taking hold under the open canopy of the original trees and initiating a change to a rainforest type of vegetation.

Gilbert Bates has contributed some of the above information on lantana and the retreat of the rainforests.

Wed. Sept. 29: My missing raiment has turned up. Marie, when she returned from Cooktown last week, sent it to the cleaners. Late this afternoon, Marie got back to Cairns from a 3-day tour of the Atherton Tableland and the Babinda area.

Geoff, George and Van arrived on the "Merinda" from Cooktown about 4PM. Gallop drove me to the wharf to meet them. The Merinda called at the Bloomfield River settlement and there took on board an unconventional tourist who is poking about on her own and visiting some out-of-the-way places on this coast. This is Lady Bissett, wife of the captain of the "Queen Mary." She speaks with a slight accent which might be Cockney. Certainly it is not Oxford. Middle aged, shortish, stoutish, and unaffected, she had amongst her many pieces of baggage one of those rough baskets which natives make in a hurry from green coconut leaves.

The final trip by George and Van out of Cooktown did not yield very much, but the catch included two specimens of Leggadina, taken from under sheets of galvanized iron lying on the ground. The one other specimen we have of this tiny

mouse was found by Geoff ~~when~~ under a sheet of galvanized in an abandoned camp on the Batavia River.

George and Van collected in the following localities in the Cooktown area after leaving the base camp at Shipton's Flat:

1. Helenvale, Annan River. Sept. 16-17-18-19.
2. Bowie's Spring, Black Mountain. Sept. 20-21.
3. Alderbury Station, Cooktown-Laura Railway (25 miles from Cooktown). Sept. 23-24.
4. Segren's Farm, Endeavour River, 10 miles west of Cooktown. Sep.25-26-27.

Thursday Sept.30: Much activity in the corner of the large warehouse of Burns Philp & Co. which we have used for storage purposes and in which we are now packing collections and gear for shipment to the U.S. Our Coen cargo was delivered from the "Lady Jocelyn" early this morning. So far as can be seen without opening boxes and cartons for detailed inspection, the materials shipped from various parts of the Peninsula by sea and air freight, and stored in Cairns, are in perfect condition. There was no damage to containers in transit, and the contents of containers which have been opened for re-packing are in first class shape.

On this trip, my herbarium specimens have been packed in cartons, with napthaline, and the cartons sealed with gummed paper tape. Not one carton has been damaged in transit from collecting camp to the warehouse in Cairns, although nearly all of them were shipped loose, without wrapping, boxing or crating.

George and Van have been very careful about drying and packing their mammal specimens. Skins have been treated with a dry mixture of arsenic and alum, and packed in the "Black boxes" and 3-ply knockdown boxes which we used on our New Guinea trips. Napthaline and paradichlorbenzene were used as insect repellants in the boxes of dried skins. Skulls, after being thoroughly dried (in my plant drying equipment), were packed in ordinary ~~fruitxcans~~ food cans - not fricton-top cans, but the hermatically sealed kind - and secured by roughly crimping the top of the can over the partly severed top. This pack allows good ventilation for the skulls, and saves the necessity of carrying special cans for the purpose.

All snakes and other reptiles, and amphibians, were preserved in formalin, and the solution poured off before final packing for shipment to the U.S. Geoffs insects are in a heterogeneous lot of containers, some of them not as good as could be desired. Except in glassine envelopes, requirements were greatly under estimated and under supplied by the Insect Dept. at the Museum.

Don Vernon has not shared our apparent good fortune in regard to condition of collections. Many of his bird and mammal skins which were collected in the Iron Range area and shipped from Portland Roads, were in a pretty bad condition with mold, and some of the mammal skins were beginning to slip, or had slipped, when they arrived in Brisbane. Don used borax or borax and alum on his made-up skins, salt on his large skins. He was under a strict prohibition from Mack against the use of poison on skins, and napthaline or ~~di~~ paradichlor. for packing. I am unable to say how well Don dried his skins, but both George and I did our best to advise him on the importance of this, as well as other matters in regard to his collecting, and he was always keen to learn. Mack would not admit that his methods could be at fault when the Iron Range skins reached the Museum in bad condition. None of Mack's rather meager field experience has been in the tropics, but, stubborn Scotchman that he is, he insisted that Don carry on with methods which serve well enough in drier and cooler parts of Australia but are risky indeed on the Cape York Peninsula. It is understandable that Mack is nervous about the condition of Don's

[illegible] was found by Geoff when under a sheet of galvanized iron or [illegible] on the [illegible] River.

George and [illegible] collected in the following localities in the [illegible] after [illegible] the base camp at [illegible]'s Flat:

1. [illegible], [illegible] River. Sept. [illegible].
2. [illegible] Spring, Black Mountain. Sept. 20-21.
3. [illegible] Station, [illegible] Railway ([illegible] miles [illegible]). Sept. 22-26.
4. [illegible]'s Farm, [illegible] River, 10 miles west of [illegible]. Sept. [illegible].

[illegible] Much activity in the corner of the large warehouse of [illegible] Philp & Co. which we have used for storage purposes and in which we are now packing collections and gear for shipment to the U.S. [illegible] [illegible] and cartons for [illegible] [illegible] have been packed and stored [illegible] are in perfect condition. There may be damage [illegible] contents of containers which have been [illegible] [illegible].

On [illegible] the [illegible] specimens have been packed in cartons with [illegible], and the cartons sealed with gummed paper tape. [illegible] been damaged in [illegible] from [illegible] nearly all of them were slipped loose, without breaking, or cracking.

George and I have been very careful about [illegible] and packing their mammal specimens. Skins have been treated with a dry mixture of arsenic and alum, and packed in the "Black Jack" and [illegible] which [illegible]. Naphthalene and paradichlorobenzene were [illegible] in the boxes of [illegible]. Skulls, after being thoroughly dried [illegible], were packed in [illegible] but the hermetically sealed [illegible] of [illegible] over the [illegible] covered top. This [illegible] the skulls, and saves the necessity of [illegible] special [illegible] for the purpose.

[illegible] and other reptiles, and amphibians, were preserved in formalin and the solution poured off before final packing for shipment to the U.S. [illegible] insects are in a heterogeneous lot of containers, some of them not so [illegible] could be desired. Except in glassine envelopes, [illegible] are [illegible] and under [illegible] supplied by the [illegible] of the Museum.

Don Vernon has now started our [illegible] collections. Many of his bird and mammal skins which were [illegible] in the [illegible] Range area and shipped from [illegible], were in a [illegible] bad condition with [illegible], and some of the mammal skins were beginning to split, or had slipped, when they arrived in [illegible]. Don used [illegible] on the large skins. He was under a [illegible] use of poison on skins, and emphatically [illegible] for packing. I am unable to say how well he treated his skins, but both George and I did our best to advise him on the importance of this as well as other matters in regard to his collecting, and he was always keen to learn. [illegible] would not admit that his methods could be at fault when the Iron Range skins reached the Museum in bad condition. None of [illegible] rather meager field experience has been in the tropics, only [illegible] he insisted that [illegible] with methods which serve well enough in drier and cooler parts of Australia but are [illegible] in the [illegible] Peninsula. It is understandable that [illegible] is [illegible] about the condition of [illegible]

collections from the Coen series of camps.

Sat. Oct. 2: The last of our crates was nailed and strapped this morning, we have our State permits for export, and all is ready for the shippig people to make out the documents on Monday. We were careful to save all the crates and packing cases in which our equipment and supplies came from the U.S.. I am more than glad that we did this, for lumber suitable for crates is hard to find in Cairns, and I doubt if we could have had crates made in the time we had at our disposal. We did not find our agents of much use in the rush job of getting our cargo ready for shipment. They did not live up to a promise to supply us with a carpenter, who could have made short work of adapting and bracing crates and saved us considerable hard work and time wasted in laboring with inadequate tools. Our cargo must be on the wharf on Monday, ready for loading on the "Wandana."

Our local agents, Burns Philp & Co., have been very helpful most of the time, but not to the extent, I feel, that they should claim a fee of fifty guineas (about $180 at present rate of exchange) for their trouble. This, I was blandly informed by Dupain the manager, would be their charge to cover services and use of storage space. I had to pay it of course, but I paid it on protest, and Dupain will refer the matter to his directors who, he says, set the fee. I have never heard of a scientific expedition being treated thus by local merchants who, while acting as their agents, reaped a profit by supply of stores and collected regular trade commissions and fees for handling shipping and forwarding business.

Our packing job has been hampered by friends and strangers coming in to look,and ask questions. I have had various calls to make, and there has been no lack of social activity in the evenings. The whole party of us have been entertained by the Bates and Stephens in their homes. This afternoon we had a last look at one of the local beauty spots. Marie, Van and I were the guests of Hazel Heale at an afternoon tea and swimming party at Barron Waters. We all dined with Mr. & Mrs. Jack Warner, in town. Hazel Heale is daughter of a wealthy farmer of the Atherton Tableland, has lived in a tin mining area in Malaya, and writes feature articles for the Cairns evening paper. Warner is a sugar farmer. A town medico, Dr. Clarke, was in the party.

We are taking back to the States only equipment; and articles of supply worth the freight. In Cooktown I gave to the public hospital most of our medical supplies. Mammal collecting supplies, of which we had a large surplus, were given to the Queensland Museum, and some to the North Queensland Naturalists' Club of Cairns. To the Naturalists' Club I have given a complete plant-drying outfit, and my surplus supplies, which did not amount to much except in corrugates and seed packets.

Since we left Cairns for the field in April, the Naturalists's Club has made good progress in getting settled in their new quarters. The Harbour Board has given them the use of two military huts on the waterfront, for temporary headquarters and a museum. The collections of the club have been moved into the buildings and display groups are being installed in the museum section. The herbarium is by far the most valuable of the collections. It is the only collection on which sustained work has been done. Due very largely to the efforts of Dr. Flecker, who founded the club, and whose chief interest is plants, a very good collection of plants has been got together. Most of the plants are from the Cairns district, which has an extremely rich and varied flora. All the specimens are poisoned and mounted. With the exception of some of the older specimens, which were attacked by insects before Flecker learned

how to look after them, the collection is in good condition.

There is a movement in Cairns to establish a district natural history and historical museum. Leaders in the movement are the Harbour Board and the Naturalists' Club. The idea is to make it a War Memorial museum. Support has been sought from the city council and the influential RSSILA (ex-servicemans' organization). The town council, dominated by Mayor Collins, who has held office continuously for 21 years, has not been helpful. Collins wants a memorial park, out at Edge Hill, where he lives and has property. The RSSILA, all for the museum idea at first, is now split two ways, one faction supporting the battlers for the museum, the other, and apparently the most powerful, falling in behind the mayor. The harbour board has plans for early reclamation of ten acres of mudflat at the inner entrance to the warfage area and they have offered a site for a museum and grounds ~~xx~~ there. This site would be ideal. The Cairns harbour is a beauty spot, instead of the all too common slummy approach to a coastal commercial center. But as I see it the outlook for starting the museum is not very promising at the present time. The political situation is not favorable, nor is there any interest in top business circles. The blight of absentee ownership lies on trade and industry. Profits are the one interest, and profits go to the controlling share holders in the South. Still fighting hard, though somewhat discouraged, the pro-museum committee has approached General Douglas Macarthur in the hope that through him the U.S. government might be brought to show interest in the scheme. Cairns was a great transportation and training area for U.S. forces during the Pacific campaign of World War II.

Sunday Oct. 3: Leaving Geoff in charge in Cairns, I flew to Brisbane (Marie with me). Left Cairns at 6:55 AM and arrived in Brisbane about the middle of the afternoon. Traveled TAA (Trans-Australian Airways) on a DC3 of modern type. The names of Australian airlines are confusing to a stranger. TAA is owned by the Commonwealth government, and is a thorn in the side of ANA (Australian National Airways), which is privately owned and for a long time had a virtual monopoly on the more lucrative routes. TAA was established only two years ago and still operates in the red. It began by reducing rates. Now a third big outfit, Ansett Airlines, has entered the field, and has reduced rates still further. A bitter tussle is going on and the powers at work are not generally known to the public. As far as I can make out, ANA is owned by big British shipping interests; their hold on air traffic has been resented by a socialistically inclined Federal government, and their rates complained of by the public. (ANA rates remain unchanged where they have no competition, e.g. the Thursday Id. run). Having bought control of the old-established QANTAS air company some years ago and since maintained services to Singapore and the Islands, also internal services, the Federal government has experience in airlines operation and TAA has a good safety record. ANA has had several bad disasters of late. Ansett is said to be owned by Australian shipping interests, but carries the name of its managing director, Ansett, a bright young man of 28. Air services are only a sideline for Ansett. They are going into the tourist business in a big way: buying hotels, bus lines and small ships, and embarking on a scheme for developing resorts on islands inside the Barrier Reef, where they are building hotels described as modern.

The Australian press is beating the war drums to an increased tempo of late, without much visible effect upon the population. But one sees signs of preparation for an emergency. The great string of military airports along the east coast are being enlarged so that their runways can be used by the most modern big planes.
Staying at Lennons Hotel.

and I

Friday Oct.8: Business well in hand. Marie left by bus to spend weekend at Toowoomba and Crows Nest. Geoff arrived from Cairns by plane yesterday and leaves for Sydney today. He wants to sell Angus & Robertson a book on the expedition. The Wandana, with Van and our cargo on board, left Cairns on the 5th.

Clearance of our cargo for the U.S. will be a matter of course in regard to the equipment and supplies we are taking back with us. Since arrangements for our coming here were made onministerial level, the Collector of Customs here in Brisbane feels that permission to export our collections will have to come from Canberra, and the machinery has been set in motion.

No one seems to have precise knowledge as to the whole process of personal clearances for the U.S. Have learned of different requirements from the U.S. Consul (Peck), Wilson who handles passenger traffic for Burns Philp, and Chief Inspector Degnan of Customs. Requirements learned so far are: Income tax clearance (which has proved a mere formality); permission to remove U.S. funds (arranged through our bank, and we can get a permit to take out as much as we brought in); smallpox vaccination (a requirement of the U.S. of recent innovation for boat passengers. Certificate of vaccination within last 12 months, and reaction thereto, is acceptable, but Marie and I do not have such ducument. Commonwealth Health Dept. does the vaccination at the very nominal charge of 2/6 per person); general health certificate (U.S. requirement, only applicable to aliens; arranged for Geoff by the shipping agents); payment of U.S. head tax in advance (concerns only aliens resident in U.S.); baggage clearance from Customs (Fill in form in advance; get clearance on dock. Export of gold and some other items prohibited, and one can take out onlyL10 in Australian currency. Baggage liable to search); food ration cards - return to Customs man on dock; alien registration cards - return to Immigration agent on ship.

Official calls, on winding up of expedition, have been made on Gair, Acting Premier of Queensland; Kemp, head of Main Roads Commission; McLean, Under Secretary for Lands, and Chairman, Land Administration Board; Grenning, Director of Forests. Some other men I have to see are out of town.

Grenning most apologetic about the refusal of his department to grant permission for us to collect mammals in the Bellenden-Ker National Park, or any other national park, when we were strikebound in Cairns at the beginning of the expedition. Puts the blame on Trist, secretary of the dept., who administers national parks, and who took it upon himself to knock us back in Grenning's absence on some official tour. Grenning's excuses do not hold water, and they do not explain his omission to reply to a letter I wrote him on the subject, or the Minister's failure to acknowledge representations I made to him. I let the matter lie where Grenning dropped it. Nothing to be gained by making a fuss now. But perhaps the next American party will get more sympathetic treatment from the Forestry Department. It is the only government setup in the country which has not been wholly cooperative, and very nice about it, in our project. Grenning is a forestry graduate of Harvard.

Did a short broadcast on the expedition over the national network last evening. Am booked for another for next Tuesday evening.

Monday Oct.11: Got back to Brisbane, and Lennons, during the afternoon. Van arrived on the Wandana during the morning and is staying at the Canberra Hotel.

Tuesday Oct.12: Marie left by air on a short visit to Sydney. My first business call was to Burns Philp, where I learned that the "Pioneer Star" has been delayed in southern ports and is now expected to leave Brisbane on the 20th or 21st.

Sunday Oct. 17: Geoff returned from Sydney about the middle of the week, reporting interest by Angus & Robertson in the book he proposes to write. Marie flew back from Sydney today. Since Wednesday I have been staying with my parents at Bulimba. Geoff is staying at the Canberra.

The Pioneer Star has been further delayed and is now expected to sail from Brisbane on the 25th. These delays in sailing are costing us money in hotel bills, but they have eased the pressure in finalizing business.

Van is spending his time at the Museum, going through the mammal collections and making notes on them. The Museum does not have very much to show in mammals. Have seen some mounts of mammals which Don Vernon is finishing, and they look very good to me. Don's Coen collections arrived on the Wandana, in good condition. His - or Mack's - methods of preservation worked well enough in the dry climate of the Coen area.

At the Queensland Herbarium there is much interest in the botanical work which has been done by the Archbold Expeditions to New Guinea, and the staff is keen to work on the Cape York collections. New Guinea-Australian connections are being studied here, especially by White and Smith. For some years now the Queensland botanists have been regarded as the Australian authorities on the New Guinea flora, and their work on New Guinea plants has been greatly increased with stepped-up forestry and agricultural activities on the part of the new post-war administration in New Guinea. White is ill with heart and bladder trouble and looks as if he might not last very long. Lindsay Smith, who was with an AIF forest survey unit in eastern N.G. during the war, is being groomed to specialize in N.G. plants. He seems to be developing very well. Francis, who has done much work on the rain-forest plants of Queensland and has done some work with White on N.G. plants, is mainly concerned with routine duties these days. Blake, specializing in sedges and grasses, and an exceptionally good botanist, has spent a good part of the past two years on lean to the ~~Gx~~ CSIR in connection with land use suryeys being carried out in northern parts of the Northery Territory (e.g. Daly River) and on the Barkly Tableland. Selwyn Everist spends most of his time on pasture problems in the west. He is now studying regeneration of mulga.

The work of White and Smith on New Guinea and Solomons plants (White, during the war, spent six months in the Solomons for the Imperial Forestry Institute) is being hampered by the failure of the Arnold Arboretum to send to the Queensland Herbarium its set of the Archbold collections from New Guinea. I wrote the Arboretum about this in January and I hear from Dr. Perry that the work of segregating the set is now well advanced.

Was gratified to hear from Smith that he found my ecological papers useful in his field work in New Guinea. He carried my 1938-39 report as a handbook, and from it was often able to anticipate zonal changes as he traveled through the mountains, and know what trees he would find in the various types of forest.

Arthur Bell, Under Secretary, Dept. Agriculture & Stock, and a good friend of our expedition, has returned from the Northern Territyry, where, as a member of the advisory committee which is working on plans for development of the North, he has been inspecting experimental ~~farms~~ plantings of economic plants. He could not give me much information on the Arnhem Land Expedition of the National Geographic Soc. About all he knew was that members of the partyhave somewhat of a reputation for getting lost and meeting other sorts of difficulties. Bell inquired about possibilities for growing cane sugar on the Cape York Peninsula, and is especially interested in the Princess Charlotte Bay area for this purpose.

Monday Oct. 18: Gave a talk on Nyasaland at a meeting of the Queensland Naturalists' Club. Marie has been on the air (National Network) on the subject of her visit to the north.

Tues. Oct.19: A long car drive through the far flung western suburbs with J. T. Brooks (father of George Brooks of Cairns) gave us an opportunity to see the ~~new~~ buildings which are going up on the new site of the Queensland University at St.Lucia. Construction of the huge main building is well on the way to completion, and walls are rising from the foundations of several college buildings. Work was held up for years during the war and evidently is not being pushed very strenuously now. Post-war shortage of materials is said to be a factor. Building is of dressed Ipswich freestone, and of brick faced with freestone. The pale purplish brown of the freestone gives the great straight-lined pile an airy look, as of a distant desert butte softly aglow at sunrise, but what will it look like when the stone loses its freshness? The interior is attractive, and well lighted by windows set more than head high above the floors, but ventilation seems poor, in fact there is no cross ventilation at all and air conditioning is not part of the scheme. Bulldozers are smoothing the sloping grounds and drives are being made. In rooms of the Law department on the second floor, the Queensland branch of the ~~Sx~~ CSIR, headed by , has established temporary headquarters. showed us around and gave us afternoon tea.

Dined with the Brooks at their home at Kalinga. Brooks interested in insects and economic plants, especially medicinal plants. Is experimenting with the commercial culture of ginger. Plants it in beds covered with about 4-6 inches of sawdust. When grown this way, the rhizomes develop in the sawdust, and are easy to harvest and free of blemish through contact with the soil.

Sat. Oct.23: George arrived from the north during the week. He is to leave for Sydney on Monday 25th, and from there take Pan-American plane for San Francisco on the 27th.

George saw a lot of country but collected very few mammals on this final part of his independent reconnaissance financed by the Museum. The first trip on his itinerary after parting company with our epxpedition was to the Windsor Tableland. I envied him this trip. It was to take him into a big highland area quite unknown biologically, in the mountains roughly west of Mossman. Gallop of Main Roads has a scheme for building a road across the Windsor Tableland as a link ~~between~~ in the strategic road which is being planned to penetrate the Cape York Peninsula. Gallop's proposed road will also open up valuable timber lands (the Forestry Dept. will provide half a million pounds for this) on an area lying at approximately 3,000 ft., and larger than the Atherton Tableland. At the present time the Windsor Tableland is unpopulated, and is only used by graziers of the upper Mitchell River who drive cattle up there for pasturage in times of drought. Gallop has chosen the alignment for a road up the steep southern approaches to the tableland, an approach now possible only on foot or on horseback. He wished to traverse the top of the tableland and try to find a way down from its northern end, and he invited George to join his party. They drove from Cairns to Mt. Carbine, and on to the foot of the climb, where arrangements had been made for them to be met by a pack horse outfit. But the horses did not turn up, and the whole trip was a washout. George climbed a 1000 feet or so up the slopes, but did not reach the tableland.

From Cairns, George took train to Townsville and out west to Mt.Isa, where he had an introduction to the manager of the great silver-lead mines. Did a little trapping there, then took train south to Winton, in to the coast at Rockhampton, and south to Brisbane. He found mammals scarce in the northwest. Attributes this to the present drought, or to a cyclic downswing in abundance.

Ministerial permission for the export of our collections has not yet come from the Customs Department at Canberra. My formal application for permission was sent through the Collector of Customs in Brisbane, who wrote Canberra that he would clear the collections unless instructed not to do so. We have the clearance.

A final surprise from Burns Philp came with their bill for handling the shipment of our cargo. They have charged us with an insurance rate of 2½% on our cargo being shipped on the Pioneer Star, as against the rate of 1½% which we paid on our cargo from New York to Brisbane. The route, through the Panama Canal, is the same. If rates for this route have been increased, owing to supposed war risk, or for any other reason, I have not heard of it.

Thursday Oct. 28: After a succession of day to day delays, only vaguely explained by the agents, our ship finished loading about 4 oclock this afternoon and cast off her lines half an hour later. Geoff and Van have been living aboard since yesterday. Marie and I came on board this afternoon. The ship did her loading at Burt's Wharf, on the Hamilton reach of the river. Our baggage was cleared by Customs without inspection. Since our arrival in the country, we have had favored treatment by Customs. One of their head men even looked us up on the ship to say goodbye. Everywhere we have been asked, "When are you coming back?"

Tuesday Nov.16: An eventful day in a restful though rather monotonous voyage. Crossed the equator (without ceremony), passed within about 15 miles of one of the northern small islands of the Galapagos Group, and saw a ship. Our only previous sight of land was a small low-lying sandy island of the Tuamotu Group, near the middle of the Pacific. Today's ship was the first seen on the voyage - a small, rusty, powerdriven vessel of perhaps 100 tons, steering an erratic course, and followed by a big flock of gulls, about 10 miles east of the island. Evidently a fishing boat. Am informed by our first mate that tuna fishing is quite an industry in Galapagos waters. Modern boats, specially built for the job, come down from the Californian coast. The boat we saw today did not look American.

The small island of the Galapagos was barely a mile across and rose from the water in sheer cliffs perhaps 200-300 feet high. Grassy on top. A mass of dark objects on the highest elevation (ca.750-1000 ft.) may have been trees, but had more the appearance of rocks. The cliffs of flat-bedded strata, showing whitish bands of rock. We did not see the main islands of the Galapagos Group.

Friday Nov.19: About daylight we dropped anchor in the island-protected roadstead off the entrance to the Panama Canal to await quarantine clearance and a pilot. A hilly, forested coast, looking much like any other part of the wet tropics. The steep contours and sharp crestlines are those of a rapid-erosion topography.

Entered Miraflores Locks between 8.30 and 9 oclock, cleared the last step of Gatun Locks about 5.30, and docked at Cristobal half an hour later. Our pilot had with him a canal official, whose functions no one knew. Before entering the first lock we picked up about a dozen negroes to handle the towlines by which the ship was towed through the locks by powerful electric "mules," three on each side. Impressive efficiency was shown in handling our ship, and in the regulation of traffic. Our pilot (Capt. Smith - on the job since 1926) controlled the mules

with a few whistle signals, and waves of his arms. He had a portable radio phone with which to keep in touch with control stations. The shores of Gatun Lake, in the middle of the Isthmus, are largely undisturbed by man. Forests come right down to the edge of the water. Rain forest apparently rich in species of plants but composed of trees that are not very tall. Palms of several species abundant. The biological station on Barro Colorado Island is in such surroundings. A very dilapidated and only partly legible notice board identifies the island. The buildings are in a narrow strip of clearing in the forest, well above the water on a steep hillside. A flight of steps lead down to the water and boathouse. Two or three small wooden buildings are in process of construction, on the slope below the cluster of two or three main buildings. Saw no other sign of activity through the glasses as we passed, and no one was at work on the new huts. That was about 3 oclock in the afternoon.

During the day we met about 8 or ten ships going west, including two big U.S. Army cargo transports. No other sign of military activity except for several jet fighters in the air near Balboa. Am told that quite a show was put on when several small Russian ships, bound from the Baltic to Vladivostock, passed through the canal recently. Extra jet planes were there for the occasion, and office staff of the depleted garrison was roused out to drive trucks and haul guns about. Yet, unexpectedly, we were told that restrictions on photographs have been lifted. I should say that every owner of a camera on our ship made pictures today.

Geoff left the ship at Balboa, going ashore in the agent's boat. He will fly to Miami tonight, where Miriam is to meet him. At Balboa a Navy doctor came aboard to examine Mrs. MacKenzie, one of our passengers from Sydney, who has been ill for most of the trip and lately confined to her bed. The sick woman was taken off in a stretcher at Pedro Miquel Lock, her illness undiagnosed

Having 23 tons of cargo to put off for British Honduras, we docked for a couple of hours at Cristobal. Tied up about 6 oclock. The Republic of Panama is in turmoil following a general election. The candidate (Arias?) who polled most popular votes lost on the count of electoral votes, and a phoney electoral count is alleged by his supporters. Some such trouble. At any rate, the Zone police are on their toes, and we were not allowed into the town of Colon without our passports. The ship's agent said nothing about this. Consequently we had to go back to the ship for our papers and did not have much time for sightseeing. Further, we were warned not to venture away from the center of the town on foot. Some nice looking shops, mostly owned by Hindoos, and lots of drinking places. Most of our sidelights on Colon were gained in Jim Gray's Tropico bar, where alert negro waiters serve good beer and poor cuba libras.

Tuesday Nov.23 - Fri. Nov.26: At Port of Spain, Trinidad.

Shortly after daylight on the morning of the 23rd we passed through the Dragon's Mouth into the Gulf of Paria and about 8 oclock anchored off Port of Spain to await a place at the wharf. Since leaving the Canal the coast of the Spanish Main that we have seen, and Aruba and some smaller Islands, have been dry appearing. At Trinidad we are again in wet tropics although, on passing close to the largest of the islands in the Dragon's Mouth, and putting the glasses on the green, rich looking vegetation of the very steep seaward slope, I was surprised to find it composed mainly of succulent plants - a green Agave the principal plant, and a tall organpipe cactus very common and conspicuous. The vegetation of the Gulf side of the island had the same green, but there it appeared to be rainforest and I could not see any of the tall cactus plants.

Between the Dragon's Mouth and Port of Spain, we passed the U.S. naval base built during World War II, then a great bauxite trans-shipment plant which is being erected by Alcoa. Bauxite is now trans-shipped out in the harbour or rather the open roadstead. Two big ships (Liberty ships?), fitted with grabllines,

are anchored there as floating storage bins and handling plants, and cargoes of ore coming from Dutch ~~Guiana~~ Guiana are unloaded there, and transferred to the much larger ships which take it to the U.S. As now carried out, the handling of bauxite is a messy job accompanied by considerable loss of ore. Instead of being lowered into the holds of the ships that are being loaded, the grabline shovels are opened high in the air. The large dust content of the ore is caught by the wind and carried over the harbor, in a pale brownish cloud which almost obscured the bauxite ships at times. By letting the ore go in the air perhaps half a minute is gained on each release. The loss of ore carried away by wind must be quite appreciable, while the lost material, settling on the bottom, might in no long time be expected to affect soundings in a harbor which is not very deep.

The actual harbor at Port of Spain is a dredged basin with a depth of about 30 feet, made in recent years by joint British and U.S. effort, and containing very good wharfage for about six large ships. The largest vessels still have to anchor 2 or 3 miles off shore in the open roadstead. The port is extremely busy. I counted 18 large ships the morning we arrived, and over 30 small vessels including sailing craft which ply to the mainland and through the islands. The very large export of petroleum oils is shipped from Brighton, about 30 miles south of Port of Spain, and so is the product from the famous pitch lake. Trinidad is the largest producer of oil in the British Empire.

Next to oil, sugar is the most important production of Trinidad. Rice is a big crop. Cacao, copra, and citrus fruits are important exports, as are rum and angustura bitters. Grapefruit is the chief citrus crop. Both fresh citrus fruit and canned juices are sent to Britian.

About half of Trinidad is under cultivation. The Conservator of Forests (Sale) tells me that the forestry situation is excellent. An abundant supply of timber- all hardwoods - from the rainforests. At least some of the rainforests are being managed on a sustained yield basis, and Sale is optimistic about being able to increase the proportion of high grade timber trees by planting after selective cutting in the natural forests. Sale was in Nigeria and Mauritius before coming to Trinidad. Knows Willan, who is now Conservator in Nyasaland.

According to Murray of Dept. of Agriculture, the bulk of agricultural products produced for export is grown by big planters. But there are many peasant farmers cultivating from ½ to 3 acres without even a mule. They work the land with digging hoes, and grow mostly sugarcane. There is no system at all to peasant farming. Cane is commonly ratooned for 10 years, until the soil is practically exhausted. Water buffalo are used in cultivation of the rice fields. Citrus fruits are grown on heavy clayey soils; sour orange is used for budding stock. We saw extensive citrus (grapefruit & orange) plantings in the narrow Santa Cruz valley. The groves did not look very well: the ground covered with grass and weeds and the trees blackish with smut and not well pruned. Small plantation crops include coffee (mostly robusta), and tonka bean (used for flavoring tobacco).

Over one-third of Trinidad's half million of population is classed as negro, about one-third is East Indian (British India). There are numerous Chinese, in business as merchants and small traders. The small white population includes French and Spanish elements, besides British. Trinidad is going through a period post-war inflation and living costs are said to be very high, at least for people who live in European style. For example, eggs imported from Canada sell at $1.40 per dozen, beef and mutton at about $1.20 to $1.40. A great deal of money from the lavish expenditure of U.S. on Army and Navy bases during the war is still in circulation. The oil and sugar industries pay out a lot of money, and the result is inflation, according to Robert Ross, Industrial Adviser to the government. Government laborers, who before the war earned 40 or 50 cents a day, now draw $1.70. The colored people look well fed and they are reasonably well

clothed. Housing is about what one would expect in a country in which the great bulk of the population is very poor in terms of money, the climate is mild, and there is an active government health department. Notwithstanding comments to the contrary by our ship's officers and passengers, I should call Port of Spain a clean city. It is an old place, with narrow lanes of streets, pavements only wide enough for two people to walk abreast as a rule, and crowded little two-storied houses and shops with overhanging balconies. The streets are remarkably clean, and free of garbage. The markets are as clean and tidy as any I have seen. In the country villages we saw, some of the houses were very small. Many of them were only one-room cabins, of sawn boards or lathe and mud construction. But the villagea and cabins looked clean. And even the humblest cabin had curtains hung in its doorway and window openings. Crotons, hibiscus, and other ornamental plants grew in all the villages. There was none of the crude squalor that one sees in negro quarters in the southeastern U.S. The negro of Trinidad seems as settled in his country, and as much a part of it, as, for instance, the Javanese in Java. The town-dwelling negro seems thoroughly adjusted to his surroundings; the villager is a small agriculturist,or laborer, or trader, who looks as though he had always been what he is now, and might always remain so.

In the city and in the villages the people were always friendly in their attitude toward us, and most pleasant when spoken to. The only exceptions were some of the Hindu women who had stalls in the markets of Port of Spain. In their behaviour there was no trace in the negroes of the insolence and resentment towards whites which is so common in the United States. When I mentioned this to Ross, he assured me that there is actually a good deal of unrest in Trinidad. There were serious riots in 1937, and something approaching a revolt some years before that. The unrest is anti-white. The present center of it is the sugar districts and oil fields of the south. The leader is a negro from Granada, who was prominent in the 1937 riots and was kept locked up during World War II. This leader has a regularly employed band of 300 to 500 thugs, used in intimidation campaigns and setting fire to property. In support, behind the scenes, is a Hindu of peasant farmer stock who owns most of the movie theaters in Trinidad and is a very wealthy man. Until recently, when he was dismissed by the Governor, this Hindu was a member of the appointed Legislative Council. His dismissal is expected to ~~further~~ lead to further underground actions on his part against the government and against white supremacy. Ross is of the opinion that serious trouble might break out during the next sugar harvesting season. The insurgent elements have arms. It is known that firearms and grenades have been stolen in quantity from the U.S. bases, following reduction of garrisons to little more than a maintenance level since the end of the war. The government is entirely dependent upon native police for maintenance of law and order. There is no British military force on the island.

In view of all this, a current concert tour of Paul Robeson is causing some speculation. Robeson arrived the day we did. The negro population has gone wild over him. The governor attended his first concert. He has been given the freedom of the city. And no doubt he is being closely watched by the security service. It is being remarked that, for a negro who is so prominent a champion of his race, Robeson's prices are pretty high. Port of Spain, being on a main air route to eastern South America, is accustomed to have world famous artists stop off to give concerts, at $2 to $4 for tickets. Robeson is charging $4, $5 and $10. These prices are above the means of most negroes. Thousands stood outside the building in which the first concert was held, listening, or trying to hear the voice of their hero, while seats remained unsold.

Most of the people we came in contact with on our goings about were of the negro element. They are a people of very mixed blood. Few of them have the depth of color of the pure negro. Was astonished at the high quality of English in general use. Very good English spoken with broad vowels and a full soft accent. The standard was maintained even in arguments between police and taxi drivers.

ARCHBOLD EXPEDITIONS

OF

THE AMERICAN MUSEUM OF NATURAL HISTORY

1948 ARCHBOLD CAPE YORK EXPEDITION

LEONARD J. BRASS, LEADER
GEORGE H. H. TATE
GEOFFREY M. TATE
HOBART M. VAN DEUSEN

PLEASE ADDRESS CORRESPONDENCE
C/O BURNS, PHILP AND CO. LTD.,
CAIRNS, NO. QUEENSLAND,
AUSTRALIA

Education is free and compulsory up to the age of 14 years. Besides his appointed Council, the governor has advisers elected by the people, on adult franchize without qualifications. The voting age is 21 years. It is said that 25% of the population is illiterate. Roman Catholic is the dominant religion. Religion seems to be important in the lives of the colored people, and celebrations with churchly sanction, such as marriages and christenings, are occacions of special social enjoyment. The negroes love to laugh and to feast. There is no shortage of liquor bars, and rum is cheap, but I saw no one under the influence.

The one long excursion made by Marie and I was to Maracas Bay, on the north side of the island, about 14 miles from Port of Spain, by a magnificent scenic road. Much of the road is 500 to 1500 feet above sea level. The last seven miles of it was built by the U.S. Seabees to open up Maracas Bay as a bathing beach and thus compensate the people of Port of Spain for the loss of their former beach, which is within the area of the U.S. Naval Base. The new part of the road is a splendid engineering feat in difficult mountain country. Most of its length is through primeval, very tall, ~~fore~~ rainforest, growing on very steep slopes. A prominent lesser canopy tree is the "pui", now leafless and a mass of orange-red flowers. Pui is one of the best timber trees of the island. A Heliconia-like plant forms a large part of the second growths on steep road cuttings. Maracas Bay has a very good beach, curving between high rocky headlands, and fringed with coconut palms. There is an interesting fishing village in the bay.

Port of Spain has a very pleasant botanical garden about 60 or 70 acres in area, established in 1818. A good proportion of the trees and other plants are labelled. There are some magnificent samaan trees (Pithecelobium saman), their tremendous, wide spreading branches laden with grey pendent masses of Rhipsalis, various bromeliads, and other epiphytes. A slat house devoted to orchids contains some attractive native species, now in flower. The orchids are grown on hanging pieces of wood of the sweet calabash tree. There is a guide service at the Gardens: charge 50 cents per person for a tour lasting about 2 hours. There is also a pleasant pavilion, where one is served a good lunch for a dollar. Had a good deal of amusement out of our guide - ~~an~~ who delivered a flowery spiel as we went along, and who was right in most of his information about the plants.

Left Port of Spain about half hour after midnight of the 26th. We had put off there 2000 tons of refrigerated cargo from Australia- mainly beef and lamb and cheese. We also carried for Port of Spain a large quantity of corned beef in casks, and hundreds of cases of "Dino," a vile meat product after the style of "Spam" and "Wham" which we were obliged to eat at one time on Cape York.

Friday Dec. 3: Tied up at the U.S. Navy docks in Boston soon after daylight, having anchored in the harbor about 7 oclock last night. Unloading of our wool cargo for Boston began in short time. It took us most of the morning to pass immigration and customs and establish ourselves in hotels in the town. Most of the delay was in waiting for the officials to arrive, then, in opening every item of baggage for customs. Some of Van's baggage (collections made by George on his reconnaissance in N.S.W. and Qld., and left at the Queensland Museum) was in nailed cases.

After Boston, the ship would go on to St.Johns, New Brunswick, to unload more wool, then proceed to New York, her terminal port, to unload 3000 tons of lead ingots, frozed crayfish from West Australia, "heavy sands" from Queensland, and melted-down scrap metals from junked World War II military airplanes.

Marie and I stayed at the Essex Hotel, Nan and his wife (who met him at the ship) at the Copley Plaza. Visited the Arnold ~~Arboretum~~ Arboretum in the afternoon

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to see the folks and discuss the Cape York collections.

Dr. Perry will sort the Cape York plants and segregate a xxx study set for the Queensland Herbarium. This work will be started at once. The Cape York plants and the Queensland Herbarium set of the plants from the Fly River and Snow Mts. expeditions will be shipped to Brisbane in one consignment.

It is considered at the Arboretum that conditions in China will probably be unfavorable for botanical investigations for some time to come and another outlet is being sought for funds which had been earmarked for work in China. Attention has turned back to New Guinea and ways of getting new collections from there are being considered. Dr. Perry is trying to get in touch with New Guinea residents who would be willing, and able, to collect plants on stipend. A ten-year program for New Guinea is envisaged, with Dr. Perry in charge of the taxonomic work.

The Arboretum has lost most of its scientific staff in the past year or so. Only Johnston, Perry and Kobuski remain, with Merrill and Rehder carrying on in emeritus positions. A. C. Smith left for the National Herbarium last September. Croizat has gone to South America on an economic botanist job with a commercial company. Allen retired some months ago to look after her ailing father. Raup in now in charge at the Harvard Forest.

Sat. Dec. 4: Another visit to the Arboretum, followed by lunch with the Merrills. Left by train for Rye late in the afternoon.

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